

Glasgow Iniversity Library



From the library of Dr James Connison

Medicine

CS 17.C7

1913-T.



# Glasgow University Library

GULED	GI	IL
1 6 NOW 2001	3 U SF	LLEU 2000
3 0 JUL 2003		
MDM000 17882	0 6 APR 2010	
1 2 2 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
CANCERTERIO		

ALL ITEMS ARE ISSUED SUBJECT TO RECALL

GUL 96.18

9米口



# PHYSIOLOGICAL DEPARTMENT, UNIVERSITY OF GLASGOW.



# REPORT

UPON A

# STUDY OF THE DIET

OF THE

# LABOURING CLASSES IN THE CITY OF GLASGOW

CARRIED OUT DURING 1911-1912,

UNDER THE AUSPICES OF

THE CORPORATION OF THE CITY,

BY

DOROTHY E. LINDSAY, B.Sc.,

Carnegie Research Fellow,

WITH AN INTRODUCTION BY

D. NOËL PATON, M.D.,

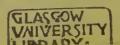
Regius Professor of Physiology.

PRINTED BY

ROBERT ANDERSON, 142 WEST NILE STREET,

GLASGOW.

\*64/6361



### INTRODUCTION.

To say that the prosperity of a city depends largely upon the health and vigour of its labouring classes is perhaps a truism. But, judging by the scant attention which is paid to the study of the factors which influence the vigour of a community, it is a truism the significance of which is not always fully appreciated.

While it may be admitted that the strength and resourcefulness of a people can be developed only by the stimulus of competitive struggle, that muscle and nerve can attain their full efficiency only by being kept constantly active, it must be recognised that, unless an adequate diet is obtainable, unless muscle and nerve are provided with the materials out of which they are built up, and from which their store of energy is derived, the work-doing power and vitality of the race must suffer.

Food is the fuel—the source of energy—of the human machine, and not only the fuel, but the very material out of which the body is constructed.

From the food the muscles must be built before they can liberate and make use of the energy contained in the food subsequently consumed. Hence the capacity of an individual for work depends not only upon his nourishment from the time of his birth, but also upon the nutrition of his parents, and particularly upon the nutrition of his mother before his birth.

For this reason, not only must a man's diet during his working years be considered, but also his nourishment during the whole period of his development and growth. Throughout his existence his ultimate power as a wage-earner is being influenced by the character of his food supply.

Under natural conditions of trade, the working man brings into the market his energy—his power of doing work—and obtains for it the most favourable price he can secure. His profits depend, on the one hand, upon the amount of energy he can supply and the price at which he can sell it, and, on the other hand, upon the price for which he can buy his source of energy—his food. An abundance of cheap and good food is the first essential for a productive working class.

The food, to be available, must not only be eaten—it must be digested and absorbed so that it may be used by the muscles. Hence any disturbance in the organs of digestion, induced by inappropriate or imperfect feeding in early life, or by neglect of the teeth in child-hood, handicaps a worker throughout his whole life by limiting the supply of energy available for work.

Such a statement of the vital importance of diet may be safely accepted, while recognising that other factors also play their part in influencing the working capacity of a community. The inertia of heredity, the influence of disease, the influence of the surroundings, sanitary or insanitary, during the period of growth, all have their effect, and none can be neglected.

The present inquiry, the results of which Miss Lindsay here records, is concerned with the question of diet. Do the working classes of this city get such a diet as will enable them to develop into strong, healthy, energetic men, and, as men, will enable them to do a strenuous day's work; or are the conditions of the labouring classes such that a suitable diet is not obtainable?

Further, if a suitable diet is obtainable, and is obtained, is it procured, or ean it be procured, at a cost low enough to leave a margin sufficient to cover the other necessary expenses of the family life, with something over for those pleasures and amenities without which the very continuance of life is of doubtful value?

If the necessary food cannot be procured at such a cost, it is conceivable that even a very small contribution to insurance for problematic benefits in future years may decrease the expenditure on the family diet, and thus involve imperfect physical development in childhood, and the benefits may thus be bought at too great a price. The results of the present enquiry suggest the necessity of carefully considering this question.

# DIETARY REQUIREMENTS.

For such an investigation as the present a knowledge of what is an adequate supply of food at different periods of life and under different conditions of life is required.

It is unnecessary here to discuss at length the physiology of dietetics. This is considered in all Text Books of Physiology. It is sufficient merely to indicate the main factors which must be known in order to appreciate what is required in a diet and to estimate the value of various diets.

The amount of food required depends primarily upon the amount of work to be done. And it must be remembered that the work of building up the body by the child after its birth, and by the mother before its birth, differs only in type from the mechanical work of the artisan. Energy is also expended in keeping the body warm; and, as a matter of fact, about three-fourths of all the energy taken in the food is expended as heat.

\* Energy is used in many different ways; and it may be measured in different ways. It may be used to heat so much water, and the heat may be converted into mechanical work as in a steam engine.

To determine the energy value of any food the simplest plan is to burn it, and to find how much heat is yielded by measuring to what extent a given bulk of water is heated For convenience, the amount of energy required to heat I kilogram (about 2½ lbs.) of water through 1°C. is accepted as the energy unit in considering the energy requirements of human beings, and this is called a *Calorie* 

The energy of 1 Calorie, if used for mechanical work, is sufficient to lift 425.5 kilograms (938 lbs.) to the height of 1 metre ( $39\frac{1}{2}$  inches).

This being so, if the amount of mechanical work a man is doing and the amount of heat he is giving out be measured, the total amount of energy he is expending is found, and, since one is convertible into the other, it is immaterial whether this is expressed in heat units, Calories, or in work units. It is more convenient to express it in Calories.

The investigations of physiologists have shown that for a moderate day's work 3,500 Calories of energy should be supplied in the food of a working man.

A woman is generally smaller than a man, and performs less mechanical work. But the day's work of a housewife is no mean task, and if the labour of child-bearing is added, it is manifest that an allowance of energy not far short of that required by a man should be furnished to a woman. It may be taken that, on an average,  $\frac{8}{10}$  (or '8) as much energy, *i.e.*, 2,800 Calories, should be allowed.

Young growing children require per unit of weight far more energy than an adult; but, since their weight is small, the total amount of energy they require is lower than that required by a man. Atwater gives the following allowances:—

Woman,	equivalent t	o 0.8 of	a man at	moderate labour.
Boy, 14-16,	,,	0.8	,,	1)
Girl, 14-16,	,,	0.7	<b>;</b> ;	,,
Child, 10-13,	,,	0.6	,,	33
Child, 6-9,	,,	0.5	, ,,	3.3
Child, 2-5,	,,	0.4	5:	,,
Child, under 2	, , , , , ,	0.3	· · ·	"

Other methods of study tend to the conclusion that for growing lads between 13 and 18 the allowance in this table is too small. But since this standard has been used in previous dietary studies, it has been retained in the present investigation. The use of so low a standard will tend to mask any deficit in the diets studied; but even upon this basis, the results here recorded show that, in too many cases, the diet is quite inadequate.

Atwater's table is particularly useful when investigating, as the present enquiry does, the diets of families.

Obviously a family, consisting of father, mother, and four children, requires a larger supply of energy per diem than a family of a mother and one daughter. To compare the requirements of the one with the other, it is convenient to express them in some common term, such as the requirements of a man per day.

To do this, the requirement of each member of the family is set down in terms of the requirements of a man taken as unity. So that the requirements of the families instanced above would be stated-

FAM	mx I.	FAMIL	v 11.
Man, Woman, Boy, 14, Child, 11, ,, 9,	1·0 ·8 ·8 ·6 ·5 ·4	Women, Girl of 14,	0.8 0.7
,, <del>),</del>	4·1 men.		1.5 men.

The dietary requirements of the first family is that of 4.1 men, of the second 1.5 men. If, then, we find the food consumed by each family, and divide that of the first family by 41, and that of the second by 1.5, we shall express it in each case as the food consumed per one man per diem, and we can thus at once compare the one with the other.

This method is adopted throughout the present investigation.

If a family diet expressed in this way gives a yield of energy of less than 3,500 Calories per man per day it is insufficient for active work, and if less than 3,000 Calories it is quite inadequate for the proper maintenance of growth and of normal activity.

The energy of the food is contained in three different constituents:— (1) The Proteins—Albuminous Foods, such as Flesh; (2) the Carbohydrates-Sugars and Starches; and (3) the Fats.

The energy-value of each of these is got by burning them. Burned in the body, 1 gram of—

body, 1 gram					4.1	Calories.
Protein	yields	• • •	• • •	• • •		,,
Carbohydrate	,,	• • •				"
Fat	,,	• • •	•••			,, ,,,

Thus a lb. of Fat yields more than twice the energy of a lb. of Protein or of Sugary food.

The proportions of these constituents which should be present in the food is determined by-

- 1. The energy-value of each.
- 2. The amount of each which can be digested.
- 3. Their relative cost.

The sugars and starches are the cheapest and most readily digested of the food stuffs, and hence, in an economical diet, they should be But under ordinary conditions only about 500 grm.\* largely used.

<sup>·035</sup> oz. \* 1 gramme 2·20462 lbs. 1 kilogramme = =453.6 grms. = 28.35 grms. 1 oz.

(about 1 lb.) can be digested in 24 hours without digestive troubles supervening, although in many individuals more can be used.

Of carbohydrates, 500 grm. yield 2,050 Calories of energy. Hence, to make up 3,500 Calories, 1,450 must be procured from fats and proteins. Fats are expensive. Margarine at 8d. per lb. yields 435 Calories of energy per penny, while sugar at  $2\frac{1}{2}$ d. a lb. yields 1,860 Calories—niore than four times that yielded per penny spent on fats. In the diet of the wealthier classes there is a tendency to increase the fats at the expense of the carbohydrates, while in the diet of the poor the reverse is the case.

Fats are not only expensive, but when taken in large quantities they are apt to upset digestion. For these reasons it is inexpedient that the amount of fat eaten should greatly exceed 100 grm. per diem. This will yield 930 Calories of Energy, and thus 520 Calories are left to be made up by proteins. About 120 grm. of the latter materials will yield this amount of energy.

It is unnecessary here to discuss the question of whether it is possible to maintain life on smaller amounts of protein. The practical point is that 120 grm. is found desirable if a well-balanced diet yielding 3,500 Calories is to be procured. Further, there is satisfactory physiological evidence that the consumption of proteins increases the activity of the chemical changes in the body, and so facilitates the setting free of energy, thus increasing the working capacity of the body. Certain it is that all energetic races in cool climates obtain, when they can afford it, at least 120 grm. of protein per man per diem.

Since the muscles and all active tissues of the body are built up of proteins, the necessity of an adequate supply of these in the diet of growing children is so manifest as to require no further elaboration.

It is thus possible to establish a definite dietary standard. For men at moderate work this should yield 3,500 Calories of energy, and should contain 120 grm. of protein per man per diem; and for women and children a proportionate diet should be provided, arranged on at least as liberal a scale as that in Atwater's table given above.

# METHODS OF INVESTIGATING DIETARIES.

The method of study in the present investigation is precisely the same as that adopted in the Edinburgh investigations carried out by Dr. Dunlop, Dr. Elsie Inglis, and myself ("A Study of the Diet of the Labouring Classes in Edinburgh." Otto Schulze & Co., Edinburgh, 1900.) It was devised by Atwater for his American studies.

A study is made as follows:—

- 1. The consent of the heads of the house is secured.
- 2. A complete list of the members of the family is made, and notes of the social conditions are taken.
- 3. The study is then begun.

- (i.) A full inventory is taken of all the food in the house, each article being weighed upon a spring balance tested at the Physiological Laboratory of the University. The price paid is also noted.
- (ii.) During the week or fortnight of the study all the food brought into the house is weighed and the price noted.
- (iii.) At the end of the study another inventory is made. This, when substracted from (i.) and (ii.), gives the amount of food consumed.
- (iv.) A note is kept of the number of meals at which each member of the household was present, three meals constituting "a day."
- (v.) When any waste was present, this was, when possible, collected in a covered tin pail and sent up to the Laboratory for investigation. In the studies of the poorer families, waste was absent—all edible food was consumed. A distinction must, of course, be drawn between waste and refuse, such as potato parings, &c.

The results were entered by the visitor making the study in specially prepared note books.

These books were then sent to the Laboratory, and the results worked out and entered upon Schedule I., which gives the total food consumed by each family (Appendix II.). From this Schedule II. was constructed, giving the results expressed in the common term of per man per diem (Appendix III.).

Since the same method has been adopted in the various Dietary Studies in America and in this country, the results may safely be compared with one another.

The families studied have been arranged in groups, and with each group a summary of the diet is given in a table. These tables show the amount of each of the food constituents—protein, fats, and carbohydrates—which are consumed per man per day. They also show the energy yielded by the diet, the amount in pence spent per man per day, and the amount of energy which is purchased per penny. The two last columns give a fair idea of the economy of the marketing.

To carry out successfully such studies requires endless tact and scrupulous care on the part of the organiser and the visitors. In the more well-to-do households the difficulties are not so great, but among the very poorest they are almost insurmountable. Miss Lindsay and those who helped her in her work are to be congratulated on having succeeded in getting accurate and valuable results from their studies of the most destitute, a class which previous investigators have found it practically impossible to reach. Our experience in Edinburgh taught me how difficult it is to carry through such investigations for even a week. Time and again we found ourselves compelled to abandon a study while it was incompleted.

An Introduction is not the place to consider the results of an investigation. But I may be allowed to direct the reader's attention specially to the consideration of the diets and family budgets of groups E, F, G, and H, which deal with the really poor, with those who have a daily struggle to make both ends meet. It will be seen that, even although over three-quarters of their meagre income is expended on food, a sufficient supply is not obtained, and that the remaining fourth of the income is quite inadequate to defray the necessary outlay on rent, coals, taxes, insurance, &c., while absolutely nothing is left for expenditure on amusements of any kind. The families in which the income is under 20s. a week entirely fail to obtain a supply of food sufficient for their needs.

But these studies also show that something at least may be done to improve this lamentable condition of things (see p. 28). They show that ignorance and bad marketing as well as penury play their part, and one or two diets demonstrate how an adequate diet may be procured on less than the average expenditure.

They encourage the hope that the teaching of the values of different foods and a training in marketing and cooking in schools may have an influence in the future.

These Glasgow studies teach the same lesson as that taught by, our Edinburgh investigations—that what is wanted is a partial return to the national dish of porridge and milk, in place of tea, bread, and jam which have so universally replaced it in towns, and which are replacing it even in rural districts.

D. NOËL PATON.

## REPORT.

In presenting this Report I desire to record my great indebtedness to the Health Committee and to the Corporation of the City of Glasgow, who voted a sum of money towards the expenses of these investigations, and to the Carnegie Trust of the Universities of Scotland, who also made a grant from which some of the expenses were defrayed.

I would also acknowledge the very valuable assistance given by Dr. A. K. Chalmers, Medical Officer of Health for the City of Glasgow, and by Dr. Roberts, Chief Medical Officer of the School Board of Glasgow.

To Mrs. Hope Gordon, Mrs. Thomas Reid, Miss Denholm, Miss Rutherfurd, and Dr. Macgregor I am indebted for procuring the names of suitable families.

My thanks are also due to those who helped me in visiting the houses and weighing the food. This part of the work was ably done by Misses Dewar, Dick, Walker, Cuthbertson, Macphail, Turnbull, Nurse Foster, Mr. Peacock, and Mr. Scott.

And, finally, I wish to express to Professor D. Noël Paton, at whose suggestion the work was begun, my most cordial thanks for his ever ready help, his kindly and keen criticism, and his constant interest throughout the course of the investigation.

The scientific work in connection with these studies was carried out in the Physiological Laboratory of the University of Glasgow.

#### PRELIMINARY STATEMENT.

Numerous interesting investigations have been made in various countries of the food used by the people. As might be expected, climate and race habit are found to have an important influence upon this, and the object of the present investigation is not to compare the diet of the poorer classes of Glasgow with that of other countries, but is rather to answer the question—Do the working classes get an adequate and suitable diet, and, if not, can any improvement be suggested without unduly increasing the cost? Similar studies have already been made in other cities.

Atwater in America carried out an extensive series of studies on families in much the same social condition as those I have dealt with. Noël Paton, Dunlop, and Inglis investigated the diets and social conditions of a score of families in Edinburgh. A similar investigation was carried on in Dublin.

In these investigations the methods employed were identical with those used by me. Rowntree also made a considerable series of observations in York. In these investigations the notes of diets were kept by the families themselves, and the studies were continued for much longer periods than in this investigation. Although the supervision was necessarily less complete and the data collected less reliable, the results are fairly comparable with those presented here.

As already stated, the primary object of these studies was to ascertain the diet obtained by the poorer labouring classes in Glasgow, but since Glasgow afforded the possibility of studying families of different nationalities of similar social conditions, some observations were made in Jewish and Italian households. The Jewish were all "kosher" families, and their food was prepared in the Jewish fashion. The Italian families neither lived in such a distinctively national way, nor did they preserve the racial character of the diet as did the Jews. The true Italian food was, in this country, too expensive. Their manner of cooking was different from the Scotch, but the food used was mostly the same.

The British families include one or two English and several Irish, but as they presented no national features, no attempt has been made

to distinguish them.

Studies were made in altogether 60 houses selected from various of the poorest districts in the City of Glasgow—Cowcaddens, Anderston, Bridgeton, Gorbals, Woodside. The British families were chosen from those living in houses of from one to two rooms, and from families of from three to ten children. The earnings varied from 13s. a week to nearly £3. In some cases the wages were regular and steady; in others they fluctuated enormously, and could not be depended on for two weeks in succession.

In spite of these differences in income neither the houses nor the manner of living showed a great improvement with the advance in wages, so that one may almost say that the housing factor is approximately constant, and may therefore lay more stress on the fluctuations in the diets obtained as a cause of the differences in physical development. XVIII., group F, and XIX., group G, for instance, are families living in low, damp houses, but their diet is adequate and the children are healthy.

The method of conducting these studies has been described in the Introduction. Most of them were carried on for a week; some were carried on for a fortnight, in order to meet the criticism that a study of seven days is too short to give a fair average. These more prolonged studies served to show that a fair average might safely be arrived at from the shorter studies

For convenience of description these sixty households have been arranged in groups, which will be considered in detail.

	_	* '							
A.	Income	regular,	children	a earr	ning,		•••	average	39s.
B.	;;	,•	lodgers	kept	,			,,	43s.
								27s. and	
D.	23	,,				٠,		20s. and	25s.
E.								under	
F.	Income	irregula	r,	. <b>?</b> .				over	20s.
G.	,,	,,						under	<b>2</b> 0s.
H.	,,	"	fathe	r a di	inker.				
К.	Jewish.								
L.	Italian.								

### 1. FAMILIES WITH REGULAR INCOME.

### GROUP A.

Wages regular: ehildren earning: average income, 39s.

In these seven households the wage of the head of the house is supplemented by that of the children. There is in consequence a steady income, which should be sufficient to provide an adequate dict. This is the period of family life among the poor when circumstances are most favourable, as the children have taken their places among the wage-earners and have not yet left the home. It is only when enquiry is made, however, that one realises how much money is actually coming into the house. The houses themselves show few signs of it in increased comfort. These families nearly all have a good show of china, and "the other room" may be well furnished. In study XIII., for instance, the second room boasted a horse-hair sofa and chairs, a clock, photographs, &c. This, however, is not always the case, and study XXXIX. shows the reverse—a very bare house up a dark stair in one of the worst streets of the district, in which there was little attempt at comfort, though the house was fairly clean and well kept.

Where money is plentiful there is not much foresight or thought expended on the marketing. Tea and sugar may perhaps be bought once a week, but supplies are mostly got by the day. In each of these seven families the bulk of the money is handed over to the housemother; and although various members of these families were not abstainers, yet, on the whole, the money spent on drink was inconsiderable. They were all decent, well-doing people. These families cannot be considered as among the very poor, and they ought to be able to afford enough to eat. Where the diet is notably inadequate, this is due mostly to bad marketing and to waste, and also to ignorance as to the best kind of food to buy.

The following table shows the details of the diets:-

Table I.

Diet per Man per Day.

No. of Study.	Protein in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny
XIII.,	- 115.0	81.9	475.0	3180.7	6.98	457
XXIII.,	- 123.7	8 <b>5</b> ·6	594.5	3740.7	6.94	539
XXXII.,	- 99.8	56.2	492.0	2949.0	5.27	559
	- 111.2	77.9	546.9	3422.6	6.07	563
XXXIX	- 1112	79.9	370.1	2723.0	5.35	509
XLI.,		,	428.2	3089.6	7.54	409
XLIII.,	- 120.2	79.7			7.44	265
LIX., -	- 84.8	87.2	200.0	1978.6	/ ' <b>1</b>	200
Standard, -	- 120	100	500	3472	-	

With one exception the energy value is fairly constant, the average being 3,184 Calories, while the extremes are 2,723 and 3,740 Calories. In only one, XXIII., does the energy value rise above the standard for moderate work. This is a household in which there had been a long period of idleness and want, during which the children suffered much from ill-health due to want of food. At the time when the study was made the father was in steady work and the mother was feeding the children well, so that they might not suffer so much during another The carbohydrate content of this diet is high, period of idleness. nearly 600 grms. In three, XXXII., XLI., and LIX., the energy value falls below the minimum of 3,000 Calories, although the expenditure per man is practically the same as that of the others. In XLI. and LIX. the deficiency is due to a lack of carbohydrates which is not compensated by an increased consumption of fat. In LIX. there is also a deficiency in the protein content. In XXXII. the low energy value is almost entirely due to want of fat in the food.

The protein intake is remarkably constant, and in only two cases does it fall below 110 grms. per diem, and in one of these it is almost 100 grms. The fat content in this diet is only 56 grms. In LIX. the protein content 84.8 grms. is much too low, and that it is inadequate for the proper development of the children is shown by the fact that one of them was attending the physically defective school. His weight was two-thirds what it should have been. This diet with its low protein content and excessively low carbohydrate intake is the poorest diet of the whole series, and its cost per man and per Calorie is high. It is an example of bad marketing, since a too great proportion has been spent on the more expensive animal foods.

The average cost per man is 6.5 pence, which is not excessive. The average return obtained is 500 Calories per penny. As regards energy value these diets are not very satisfactory. As already pointed out, of these seven diets only one exceeds the standard necessary for moderate labour, while three fall below the minimum of 3,000 Calories. A knowledge of the value of the different classes of food might probably have helped to improve these diets.

### GROUP B.

Wage regular: lodgers kept: average income, including amount paid by lodgers, 43s.

In these eight households to the wages of the head of the house the amount paid by lodgers falls to be added. In some cases also the children are earning, so that the total income of the household may be very considerable. In I., for example, in addition to the father's wage of 21s., there is 14s. earned by the son and daughter, and 25s. paid by two boarders, making a total weekly income of £3. The usual sum paid by boarders in these households is eleven to twelve shillings a week; and although the house-mothers maintain that this

sum does little more than cover the cost of the food, yet it is a help to the family diet and finances. The lodgers insist on being well fed; and though, of course, the children do not profit so directly as the adults, still they do enjoy a share of the better and more abundant food.

In several of these households the expenditure on food is very great. This is sometimes partly accounted for by the men taking their mid-day meal or "piece" with them—an extravagant method of procedure. The "piece," as a rule, consists of a couple of slices of bread and butter with a chop, or an egg, or similar addition, and some dry tea and sugar. Study I. is an example of extravagance and Irish happy-go-luckiness. A household of six consumed during the week 5 lbs. of ham and 7 dozen eggs, &c. The expenditure per man per diem is in this case very high. Study XVI., in which the expenditure per man is also high, is that of an old couple, with whom a son and his family stay, in addition to a boarder. The house is comfortable and the food abundant, but the housewife is not able to manage in the most economical fashion. She buys her food as far as possible by the week. XLVII, is a household where the lodger's money is the steadiest source of income. The mother is a widow, and although three children are now earning, their contributions are irregular owing to ill-health aggravated by a long period of distress. I. and IV. are Irish families; one consists of adults, in the other are eight children, but both families show a high expenditure per man per diem. There is an absolute lack of any appearance of care in these two houses, and things are left to manage themselves as they best can. The inmates are happy and cheery, however, and do not seem to mind the perpetual muddle.

Table II.

Diet per Man per Day.

No. of St	udy.	Protein in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
I., -		- 125.3	122.7	444.4	3476.8	11.53	301
•		138.2	87.1	611.1	3882.1	8.71	445
IV.,	•	- 124.2	118.2	505.9	3682.7	10.22	360
XVI.,	-	88.5	76.1	454.6	2934.4	7.88	372
XLV.,	•			400.7	2821.7	6.84	412
XLVI.,	-	- 96.6	84.0		2955.3	7.12	415
XLVII.	-	- 87.9	$77 \cdot 2$	467.3		9.12	380
L., -	-	- 122.2	103.1	490.6	3471:3		
LVI.,		- 110:3	85.9	500.8	3304.4	7.51	440
Standard,	-	- 120	100	500	3472.0		

The energy value of five of these diets is on the whole satisfactory. Three fall short of the minimum of 3,000 Calories. Curiously these three families lived in the same district. In two of these, XLV. and XLVII., the greatest deficiency is in the fat; in the third, in the

carbohydrates. The children in XLVII. are not strong, and are frequently off work through ill-health. In IV., which has the highest energy value, there is a very high carbohydrate content, 600 grms., and also a high protein content. One of the children in this family (No. IV.) suffers from rickets, but the others are on the whole healthy and their weight about the average.

With the same three exceptions the protein content of the diet is high, from 110 to 138 grms. The value obtained per penny is not nearly so great as that obtained in Group A—391 Calories as compared with 500 Calories. This is due to the selection of expensive animal foods. In I. this is especially noticeable; the expenditure on animal food is here nearly three times that on vegetable food, and the chief items are eggs and ham. This heavy expenditure on animal food is possibly to be explained by the requirements of those paying for board.

### GROUP C.

# Wage regular, from 27s. to 31s.

In these three households there is a distinctly higher standard of LIV. is a superior family. The husband is a carpenter, and the appearance of the house and their manner of living belong rather to the artisan than to the labouring class. This family, almost the only one of the series, has a church connection. A long period of idleness and ill-health had proved hard on them, so that at the time the study was made their expenditure was being kept as low as possible in order to enable them to pay off debts incurred. children are small and delicate. The other two families live more on the standard of the households of the labouring classes, but the houses have a comfortable, prosperous look about them, and the members have more varied interests. In each of these three households groceries are bought in by the week. The expenditure per head is about the same in each case, and is fairly high (8d. per man per diem), but the food is of good quality.

Table III.

Diet per Man per Day.

No. of Str	ıdy.	Protein in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
XXXVI.,	-	- 134.8	120.6	589.6	4091.6	7.45	549
LIV.,	-	- 112.9	84.6	495.7	3282.0	8.10	405
LVIII.,	-	- 106.4	88.1	432.8	3030.0	8.95	338
Standard,	-	- 120	100	500	3472		

#### GROUP D.

### Wage regular, from 20s. to 25s.

These ten families represent the average poorer working-class The income is steady but not large, the children not very numerous-4 to 5 on an average-and the life on the whole is reasonably comfortable. The appearance of the houses varies according to the ideas of the housewife. The energy value of the diet is generally good. In study III., where it falls short, the wife was small and delicate, and did not trouble much how she managed. The weather, too, at the time of the study was excessively hot. A second study was arranged for, but was not carried out owing to the death of the baby. Study LI., in which the energy value is fairly low, is a family where the mother, a widow, is in receipt of Parish relief and one son is now earning. There are altogether six children. children are healthy and bright and well cared for-two were going to the country to stay with friends. In this household the standard of comfort is high. XXX. is a study in a family where there are eight They live in a two-room house in a very narrow street. The rooms are a good size, but the house does not ventilate well. It is noticeable that all the children have developed rickets. One child is at present attending the invalid school, and none of the others are strong. The mother is a careful manager, and took a great interest in the study. In II. the housewife is the most careful and the best manager of all the houses visited. Sometimes she got most extraordinary bargains-for instance, one day she bought 4 lbs. of halibut for 2d., and the fish was in good condition in spite of its price. On 23s. a week she manages well. The children were, on the whole, strong and healthy, although one child had rickets. Daily buying is the rule. In only three instances was it otherwise

Table IV.

Diet per Man per Day.

No. of Stud	ly.	Protein in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
II.,	_	135.7	88.4	640.1	4003.0	6.17	648
III.,	_	83.2	49.2	510.3	2891.4	5.86	493
XII.,		134.4	90.1	492.1	3406.6	7.54	451
XXIX., -	_	141.5	89.1	588.2	3820.4	6.63	576
XXX., -		108.5	71.4	494.5	3136.3	5.16	607
XXXIV		- 126·1	93.5	594.2	3822.7	8.30	460
XXXV.		- 107.2	92.8	473.0	3241.8	8.12	399
		10.7	90.4	488.3	3341.3	7.71	433
XLIX		110.2	85.4	440.7	3052.9	6.89	443
LI., -			108:3	584.8	3848.9	8.28	464
LX., -		108:3			3472.0		
Standard,	-	- 120	100	500	9412.0		

In considering the diets groups C and D may be dealt with together.

As regards quantity, quality, and price these diets show comparatively little variation. On the whole, where the income is over 25s. the expenditure per man is greater than when the income is between 20s. and 25s. The average energy value is 3,462 Calories, so that those families in which the wage is regular and the weekly income over 20s. do manage to obtain a sufficient diet. III. is the only one of this series which differs to any extent from the others. It has a low energy value of only 2,891 Calories and the lowest protein content. The fat too is unusually low, but the hot weather at the time may account for this. When we compare this diet with II. we see that the expenditure on animal protein is practically the same (see Appendix III.), but the amount got in III. is only half what is got in II. This is, of course, partly due to the fact that in II. the housewife was able to buy fish and meat cheaply. This deficiency in animal protein is in III. not counterbalanced by the vegetable protein, and there is a very high proportion of the non-nitrogenous materials-sugar and jam. The value per penny is only 493 Calories.

With the above exception, the protein content in each of these diets is well over 100 grs. per diem.

These studies show what can be done with care and economy. In both XXXVI. and II. the energy value is over 4,000 Calories, and the expenditure per head is not excessive. In XXX. the return per penny is high—over 600 Calories. The mother in this case is also a good manager, and chooses her food carefully. Meat and fish she does not get so cheaply as the house-mother in II., but in buying bread she gets old bread and badly shaped loaves. The total Calorie value is, however, somewhat low. In this household it is probably quite impossible to afford more money for the food.

#### GROUP E.

# Wage regular, under 20s.

In these five households we have a sad state of affairs—poor houses and inadequate diet. Three, XXV., XXVIII., and LII., live in sunk houses, looking on to a courtyard. All these houses are dark, and one very damp. In XXV. the gas is needed in winter, even at mid-day. The room, however, is clean and comfortable, and in the gaslight has quite a cheerful appearance. There are five children, and the income is only 18s. a week, so that after paying rent, coal, gas, and societies, which together amount to nearly 6s. a week, the surplus left for food is very small. In XVII. the husband was only earning 4s. a week, as he had been ill. This was supplemented by his wife's earnings—10s.—and his son's—6s. None of this family are strong. All the children have developed rickets. At one time the father and three of the children were all in hospital. The father used to be a heavy drinker, but gave

it up on conversion. For several years he suffered from alcoholic poisoning, but is now better, and some time after the study was completed he began to earn 20s. a week. LH. is another household with a bad health record. The father is phthisical, and in receipt of Parish relief. The mother is out working all day, as is also one of the daughters, although the latter is very often idle through illness. This family since the study was made has removed to a larger house, which, although also sunk, gets plenty of sunshine. In these houses one notices that there is much less crockery on the shelves, e.g., china dogs and jugs, and the houses are barer than where the weekly income is more than 20s., but they are nearly all clean and well kept. In XLII., in which there are only two children, there is sometimes a considerable amount spent on drink when money is plentiful. This is indignantly denied by the mother, but confirmed by others, and with only two children they should be living much better.

Table V.

Diet per Man per Day.

No. of Study	. Protein in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
XVII., -	- 103.0	63.5	467.9	2931.2	5.42	540
XXV., -	- 82.6	75.0	320.7	2351.0	4.93	476
XXVIII., -	- 96.4	67.8	$423 \cdot 2$	2760.9	4.59	601
XLII., -	- 98.9	88.1	377.4	$2772 \cdot 2$	5.93	467
LII.,	- 108:1	87.1	337.1	$2635 \cdot 3$	6.89	382
Standard, -	- 120	100	500	3472		

In this section, which embraces those who may properly be called poor, not one diet reaches the minimum energy value of 3,000 Calories. A comparison of LII. with LI. in Group D shows that a better knowledge of marketing enables the mother to secure a better return on the same expenditure per man per diem. In LI. the use of a greater proportion of the cheaper vegetable foods, e.g., potatoes and haricot beans, gave a better energy value for the same cost. In XXVIII. the expenditure is only 4.59 pence per man per diem, and the value per penny is distinctly above the average. It shows what can be done at so low a figure. But although the house-mother has made the most of her money, the energy value is still far below the minimum required. In XXV, the animal protein is considerably in excess of the vegetable protein (see Appendix III.). As the former is more expensive, this diet could be improved and a higher protein content obtained by reversing the proportion of animal and vegetable protein. In view of the fact that the fat is low, necessarily so because of its cost, the carbohydrate intake should have been greater. The children are nearly all small and light in weight.

# II, FAMILIES WITH IRREGULAR INCOME.

We now come to the irregular wage-earners, those who live from week to week, more often from day to day, as they can afford it, well and lavishly if work has been plentiful, half starved when work is scarce. From some of these families one got interesting light thrown on the methods of the different pawnshops, the best articles to "put away," and the best people from whom to borrow money. Unless from a friend the interest is heavy; 1s. a week on a sovereign is a usual rate. This is 5 per cent. a week, or 260 per cent. per annum. These families have been classified according to their average weekly wage, which is not necessarily the wage they actually got during the week the study was made. As a rule food is bought daily, very often at night when the money comes in, but during the week of the study the women arranged to buy it in the morning, often at considerable inconvenience to themselves.

#### GROUP F.

### Wage irregular, over 20s.

In these seven households the life is very irregular. fluctuations in the work lead to days of hard work followed by days of idleness, days of plenty followed by days of starvation. The houses are clean and comfortable or the reverse according to the capacity and ideas of the housewife. The funeral societies are, as a rule, paid regularly, and are considered a first charge, coming almost before the food. When the housewife has any idea of management at all she lays past 1s. now and then towards the rent, &c., but as very often there comes an idle day or a lean week, the store is usually very small when rent day arrives. IX. is a house where everything is spotlessly clean. It is one of the best kept of the whole sixty visited. XXI. is an extraordinary contrast. It is the only case in which the mother worked at home. She fringed shawls, and every day was found working at these. She got 1s.  $4\frac{1}{2}$ d. a dozen for them, and could manage to earn about 5s. 6d. a week if working steadily at them. The husband was also earning, but most irregularly. children, none of whom were earning, managed as best they could. The family was the reverse of healthy-one child was mentally defective, two were off school through illness, and one or more were rickety. The house was up a bad stair in a bad neighbourhood, and was the third they had been in since the first visit paid to see if they would allow such a study to be made—a period of three months. The girls were learning to sew at a girls' club, and did most of the house work. Once a week or so the mother cleaned the house. This was usually done when the shawls given out to be fringed were especially delicate in colour and easily soiled,

As a whole these families are more hopeful, and take life more easily than those with a regular income. A good week means plenty for them, and enables them to live through a bad one, while they seldom think of troubling to save.

Table VI.

Diet per Man per Day.

No. of Str	udy.		Protein in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
IX.,	~	-	78.5	81.0	344.0	2485.5	7.0	355
XVIII		-	107.2	70.7	524.7	3248.3	6.74	481
XXI.,	-	-	90.9	56.5	349.0	2329.0	6.21	375
XXXI.,	-	-	128.3	79.1	$452 \cdot 3$	3116.1	6.29	495
XLIV.,	-	-	147:1	107.8	$642 \cdot 9$	$4255 \cdot 4$	9.25	460
LIII.,	-	_	90.6	55.2	406.2	$2550 \cdot 2$	5.45	467
LVII.,	-	-	113.1	$72 \cdot 2$	448.6	2974.4	6.37	467
Standard,	-	-	120	100	500	3472.0		

The diets in this group show very marked variations. The average energy value is 2,994 Calories; the extremes are 4,255 Calories and 2,329 Calories. With one exception the low energy values correspond to the low incomes, and the high energy value to the high incomes. In XLIV. the income, though irregular, was always good. It averaged The energy value obtained for the week is over 4,000 Calories. The expenditure per man is high. XVIII. is the exception referred to above, where an adequate energy value of 3,248 Calories is obtained in contrast to that obtained in IX., XXI., LIII., though the expenditure per man is much the same. The average weekly income in each of these four households was 24s. In XXI and LIII. the fat content is exceedingly low, and the protein content is also low, hence the energy value is much below the minimum. In both these families the children are delicate and in poor health. The two least economical diets in this section are IX. and XXI. In IX. this is due to the excessive expenditure on animal foods. The amount of potatoes used in IX. is nearly half as much again as bread (see Appendix II.), and the amount of the latter is small. This proportion is most unusual, and helps to explain the low protein and carbohydrate content. XXI. is also an instance of bad marketing.

#### GROUP G.

# Wage irregular, under 20s.

In these eight households the weekly income varies considerably from week to week, but very rarely rises above 20s. A hand-to-mouth existence is the rule. Tea is bought by the ounce or half ounce as is possible. The houses are very poor, some very damp or dark, but

often wonderfully well kept. In XXIV. the house-mother was with great difficulty persuaded to carry on the study, as the father was idle, and had been so for a long time, on account of illness, and in consequence their credit was done, while the mother could only manage to obtain a very occasional day's cleaning. This is unfortunately not an abnormal state of things in this household, and the diet obtained is a very usual one. Several of the children were attending the invalid school suffering from rickets, and the others were small and very much under weight. Study XL. was made at the beginning of a strike, and before its effects had begun to be felt, and it did not seem to make much difference in the food eaten. Study LV. was carried on for a fortnight. The weekly income in this house was one of the lowest recorded. The first week it was 13s., the second it was only 10s. or 11s. There were three children, all small, one of school age. The mother was small and ill developed, but the children were fairly healthy. The house contained one apartment, and was very damp and airless. Through ventilation was only possible when the neighbour opposite combined, and even then was not very satisfactory.

Table VII.

Diet per Man per Day.

No. of Study.	Protein in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
XIX., -	- 131.7	56.5	671.9	$3820 \cdot 2$	6.20	619
XXIV., -	- 64.0	48.8	413.8	2412.8	3.94	612
XXVI., -	112.0	84.0	464.3	3144.0	7.19	437
XXXVII.,	- 77.7	82.1	256.5	2133.7	5.93	<b>3</b> 59
XXXVIII.,	- 102·1	85.0	401.1	2853.6	7.50	380
XL.,	- 110.3	83.6	484.3	3215.3	6.94	463
XLVIII., -	-72.6	43.1	$345 \cdot 1$	2113.4	3.98	531
LV., -	- 102.2	58.1	421.2	$2686 \cdot 1$	4.96	541
Standard, -	- 120	100	500	3472.0	<u>·</u>	

These diets show such very marked variations that it is almost impossible to strike an average. The highest energy value got is 3,820 Calories; the lowest is 2,113 Calories. Three are above the minimum of 3,000 Calories, and one above 3,500 Calories, the standard for moderate labour. Four have a fat content of less than 60 grms.; the others have all over 80 grms. of fat. The carbohydrate content also varies enormously, from 256 grms. to 670 grms. XIX., which has the highest energy value, is also a very economical diet. The value obtained per penny is 619 Calories, and the expenditure per man is not more than the average. The amount of protein present is very satisfactory, and the abundance of carbohydrate amply compensates for the low fat intake. This diet shows the advantage of the use of oatmeal. Porridge was eaten twice a day—morning and evening.

The household of six used three-quarter stone of meal in the week, an amount very much above the average. As a result of this free use of oatmeal only 27 per cent. of the protein is animal protein, and of the energy value 85 per cent. comes from the vegetable food. The children were strong and healthy and well grown. XXIV., XXXVII., and XLVIII., the three which have the lowest energy value, are the three households with the lowest income. Thus again the low energy value is associated with the low income. XXIV. is a wonderfully economical diet, and the money spent on food could hardly have yielded a much better diet. In spite of this, both the protein and fat are very low and the carbohydrate barely sufficient. In XXXVII. the return per penny is very small. The energy value is almost the same as in XLVIII., but the expenditure per man per diem is nearly one and a-half times as great. A better diet could have been got by a more judicious expenditure of the money. In XLVIII. there is nearly twice as much vegetable protein as animal, while in XXXVII. the animal protein is in excess.

### GROUP H.

## Wage irregular: father heavy drinker.

In the families just considered very few of the parents were abstainers, and in several they drank when they had the money, but these four families have been singled out specially, because in each the father was a habitual drinker, and the amount of money available for food, &c., was only what could be wrung from him. The week of the study was, as a rule, a good week for the family, as in almost every case they shamed the father into giving out more of his wage than he sometimes did. But as he frequently gave as much, these studies represent a somewhat too favourable but not an abnormal condition of matters.

In study XIV. the mother was a melancholy woman, whose heart was nearly broken with the struggle. The daughter was in fairly steady work, and this helped matters, but only by constant visits to the pawnshop could they manage to get along. Of the 20s. which came into the house during the week of the study, 7s. 6d. was contributed by the father, 7s. 3d. by the daughter, and 5s. 3d. was got by pawning things. The factor was pressing for his rent, which was much overdue. XV. presented a great contrast. The housewife was a bright cheery woman. Two of the children were earning, and the mother went out occasionally for a day's cleaning. She was a most enterprising woman, and painted and papered the house herself, making it most comfortable and cheerful. The total weekly income available was rarely more than 20s. to 23s., as the husband seldom worked more than two or three days at a time, and unless the wife met him just after he had received his pay she got very little from him.

Table VIII.

Diet per Man per Day.

No. of Str	udy.		Protein in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
XIV.,	_	-	91.3	$56 \cdot 2$	437.5	2690.8	4.29	627
XV., -	_		9 <b>7</b> ·8	79.8	$437 \cdot 4$	2936.5	6.73	436
XXVII.,	_	_	129.0	$122 \cdot 2$	534.9	3858.4	8.21	348
XXXIII		-	97.8	69.1	510.2	3135.4	6.67	470
Standard,	-	-	120	100	500	3472.0		

In only one of these diets, XXVII., is the energy value over 3,500 Calories. This is got by a large expenditure, because the value obtained per penny is small—348 Calories. The fat content of this diet is very high, due to the amount of butter used. This necessarily raised the cost to a very high figure. In XIV., which is the most economical, the high value per penny has been obtained by cutting down the fats, which are very low. It is difficult to see how this diet could have been improved without an increased expenditure.

### III. FOREIGN FAMILIES.

GROUP K.

# Jewish families.

The five Jewish families studied are on the whole better off than most of the British families visited. The average weekly wage is 35s. In V. the father earns 17s. a week, and this is supplemented by the earnings of his wife and son. The appearance of the house and the style of living is much the same as in the British houses, but the mother is, however, more grandly dressed. A lodger sleeps in the house, which has three apartments, but he has no meals there. There are ten children, all small and delicate looking; one of them with rickets was attending the invalid school. The Jewish houses were all larger than the British, and had at least three apartments: in VII. there were four, and in VIII. six—a top flat and attics. The kitchen, as usual, is used as a living-room. There is apparently a good deal of coming and going, and friends frequently come in in the evening. The parlours are wonderful rooms, with full suites of furniture, photographs, crystal or china ornaments, antimacassars, &c., The women boasted of the fact that they had a regular dinner each day. diet in three cases was adequate but fairly expensive-" Kosher" meat costs more than that used by the Gentiles, and chickens, a weekly item, are expensive. Fish is used in large quantities. In discussing their food they made a strong point of the way in which their food is washed before being cooked. All meat which comes into the house is steeped in cold water for an hour, then placed in salt

water for half an hour. The salt is then washed out of it, and the meat is ready for cooking. This, they say, gives it a flavour unknown to the Gentiles. Macaroni they make themselves, the idea of buying it being most repugnant to them.

Table IX.

Diet per Man per Day.

No. of St	udy.	Proteiu in Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
V., -	-	- 115.0	68.1	536.5	3305.0	8.0	413
VI., -	-	- 96.8	90.3	387.1	2823.8	7.81	361
VII.,		- 145.3	133.8	$563 \cdot 2$	4149.1	10.87	381
VIII	-	- 80.2	$77 \cdot 2$	403.6	2701.5	6.77	399
XXII.,	-	- 176.0	123.1	509.4	3948.0	12.26	322
Standard,	-	- 120	100	500	3472.0		

Compared with the diets of the British families, the energy value obtained per penny by the Jews is small. Their meat is specially killed, and is rather more expensive; they use butter, never margarine, and a chicken is bought at least once a week. They buy, as a rule, half a chicken at a time, always on Friday morning, and sometimes two or three times a week. One woman maintained that the use of chickens was economical; but in that household two adults and ten children sat down contentedly to a dinner of which a half chicken was the chief item. The chief difference between V. and VI. is in the vegetable food. The diet got in VI. has a much smaller energy value, and contains for the same expenditure less protein and carbohydrates than V. The fat content is, however, considerably greater. Both in VII. and XXII. the energy value is more than sufficient. In VII. the waste must have been considerable, but it was not possible to estimate it. The diet is expensive and the return for the money spent small. In spite of complaints both from the father and mother in this family as to the hardness of the times and the difficulty of providing for a family of so many girls, there was little attempt to economise on food, although a considerable saving could thus have been made without disadvantage. None of the children were strong, and the mother had been ill. In VIII., in which the energy value is lowest, the mother prided herself on the cleanliness of her house, and did not trouble much with cooking. XXII. is an adequate but very costly diet. This household consisted of only four persons, and the weekly income was large, so that there was no necessity for economy

#### GROUP L.

# Italian families.

Only three Italian families were visited. It was found difficult to earry on these studies, as the women had no idea of accuracy. For

instance, one thought that a fish supper extra, and not reported, really did not matter. However, with care and a strict examination as to exactly what they had had, these difficulties were satisfactorily overcome in three cases.

These three families present marked differences in their mode of XX., where there was one child, and that a baby, had a more than ample diet. There was difficulty about keeping waste food, which was unfortunate, as there must have been some. They lived in a tworoomed house, but only used one room. The mother said the house was really too large for them, as they could not use a second room. They lodged formerly with a family where there were five children. They shared a two-roomed house with them, and that arrangement they liked much better. The present house was always clean and tidy. The husband is a miner, and earns a good wage. He cannot read or write. In study X. both the father and son are railwaymen, each earning 18s. a week. At the time the study was made the son was on half-pay owing to an accident to his leg which kept him off work. They lived over a fish supper shop, which is managed by the mother and eldest daughter. This they say costs more than it brings in. The mother is a bright, cheery woman, and they live a free and easy life. The shop keeps the mother up very late, so that in the morning the children get off to school as best they can. They usually have a cup of tea and a slice of bread and butter. The mother rises late, but gives them a hot dinner when they return from school about half-past twelve. The next meal is supper at six or after it, and sometimes they have something before they go to bed-a potato or bit of fish, or sometimes a fish supper. The true Italian food in Italian shops is too expensive for them to buy often, but macaroni is used in abundance, and the ways of cooking the food are Italian. One Italian woman bought two stones of macaroni at a time.

Study XI. is in a household in receipt of Parish relief. This is their sole source of income, unless occasionally when the wife gets a day's washing, or goes out with an organ and bird. The husband is incurably ill, and the wife is not strong. Of their seventeen children only three, all young, are at home. The house is fairly clean, but has a cheerless look, and there is not much appearance of comfort. They get 12s. from the Parish, their societies cost them 1s. a week, and their coal about 1s. 7d., and their food bill for the week was 15s. 6d.

One other family was visited, but the difficulty of language and want of accuracy on the part of the house-mother made it impossible to trust the results. In this household, as in XX., the diet was more than ample for their requirements. The mother said that Italians as a whole, she thought, eat more than the British.

Table X.

Diet per Man per Day.

No. of St	udy.		rotein Grms.	Fat in Grms.	Carbo- hydrates in Grms.	Calories.	Cost (pence).	Calories per penny.
X., -	_		03.4	53.8	368.7	2435.9	5.66	430
X1., -	_	- 1	24.7	82.1	536.1	3472.8	7.96	436
XX.,	~	. 1	85.8	138.5	814.4	5388.8	13.46	100
Standard,	-	- ]	120	100	500	3472.0	_	

The diets show very marked variations—both quality and quantity. XI. is the most satisfactory, and agrees very closely with the theoretical standard diet. The protein content is good, the fat content is not too low, and the return for the money spent about the average. In X. both the fat and carbohydrate are deficient, and the energy value is consequently very low. The children are small, but on the whole healthy. XX. is extravagantly abundant. It is unfortunately impossible to know how much was actually consumed, as the waste food was not kept.

# CONSIDERATION OF RESULTS.

#### I. GENERAL SUMMARY.

- 1. The average daily energy value of all the diets studied is 3,163 Calories per man.
- 2. The average composition of all the diets is 110 grams protein, 83 grams fat, and 473 grams carbohydrates.
- 3. Of the protein about two-thirds is vegetable protein.
- 4. The average cost per man per day is 7.07 pence; of groups C, D, E, F, and G, 6.07 pence.
- 5. The principal food stuffs used are bread, potato, milk, sugar, beef, vegetables. (Appendix II.)
- 6. Such valuable vegetable foods as oatmeal and peas are used in relatively small amounts. (Appendix II.)
- 7. Of the families whose weekly income is over 20s., 28.5 per cent. have a diet the energy value of which is less than 3,000 Calories.
- 8. Of the families whose weekly income is under 20s. or irregular, 62.5 per cent. have a diet the energy value of which is less than 3,000 Calories.
- 9. Not one of the families in which the wage is regular and below 20s. has a diet the energy value of which reaches the minimum of 3,000 Calories.
- 10. Taking the average intake of energy and of protein in the various groups the results are as follows:—

Group. A (ex	cluding	LIX.	abnorm	nal).	Energy.	Protein.	
В,	• • •	•••		•••	3316	111.7	Income above 20s. a week
Ď	•••		•••		$\begin{array}{c} 3467 \\ 3456 \end{array}$	$\frac{118.0}{117.7}$	regular.
E, F,	•••			•••	$2690 \\ 2994$	97.8	Income under
or (ex G,	eluding		. abnor	$^{\rm mal}$ ,	2784	108·0 101·4	20s. a week
Ĥ,	•••	•••	•••		$\begin{array}{c} 2797 \\ 3155 \end{array}$	$\frac{96.6}{103.9}$	or irregular (over 20s. in
or (ex	eluding	XXVI	II.abno	rmal	),2921	95.6	<b>F</b> ).

These figures show conclusively that while the labouring classes with a regular income of over 20s. a week generally manage to secure a diet approaching the proper standard for active life, those with a smaller income and those with an irregular income entirely fail to get a supply of food sufficient for the proper development and growth of the body or for the maintenance of a capacity for active work.

\

# II. THE POSSIBILITY OF IMPROVING THESE DIETS.

The Amount of Various Food Materials used may first be considered.

In looking over the diets one is struck by the want of variety in the food in most of the households. Bread, sugar, butter, tea, and beef occur in all without exception. Of the meats other than beef, bacon mince and sausages occur in 41 dietaries. Mince and sausages are cheap, but the quality is very variable. Fish is used in 52 of the 60 families, but in small quantities. The average amount of fish used per man per day in the British families is only 53 grms. (2 oz.). Two families used about 4 oz. per man. The average for the Jewish families is three times as great—162 grms. (6 oz.). Rabbit, a cheap food, is not popular. It occurs in only 7 diets. Cheese is used in small amounts in 41 families. Eggs are used in 46 families. They are an expensive item, but they are easily cooked, hence their popularity. The average amount of butter and margarine used is 29 grs. (1 oz.) per man per day. Butter is more largely used than margarine, the latter being used only because of its cheapness, and the women often apologised for buying it.

The principal vegetable foods are bread and potatoes. The amount of potatoes used is almost as great as the amount of bread; in one or two cases more. Oatmeal is used in 46 families, but the average amount per man per day is small—only 24 grms., or less than one

Protein from vegetable sources is from one and a-half to two times as much as that from animal sources. In one or two cases it is nearly three times as great, and in these diets the energy value received is remarkably high for the money laid out. II. (group D), XIX. (group G), and XXIV. (group G) are the most noticeable examples of this. In XIX. and XXIV. the cost of the animal protein is only half that of the vegetable, while the energy from the vegetable food is fully four times that from the animal food.

In some of the studies this proportion of animal to vegetable protein is reversed. In I. (Group B), IX. (Group F), XXXVII. (Group G), LII. (Group E), and LIX (Group A) the animal protein is greater than the vegetable. All these diets show the disadvantages of this large use of the animal foods. The energy value is low and the cost is high.

How are these diets to be improved? Study XIX. (Group G) seems to give the answer. In this family "porridge was eaten twice a day." to give the answer. In this family "porridge was eaten twice a day." The energy procured per penny spent was the second highest recorded, 619 Calories, while it is noted that the children were strong, healthy, 619 Calories, while it is noted that the children were strong, healthy, and well grown. Oatmeal is used in 46 out of the 60 families, but the amount averages about 24 grm., less than 1 oz. per man per day, a quantity which would fill two tablespoons level and make one small plateful of porridge.

Dr. J. C. Dunlop, in criticising the diets of the labouring classes in Edinburgh, gives the following comparison of the cost and composition of the perpetual tea, bread, and butter meal and a meal of porridge and milk :-

		Protein.	Fat.	Carbohydrates.	Cost.
Tea,					
Sugar, $\frac{1}{2}$ oz.,		—		14.2	
Milk, $1\frac{1}{4}$ oz.,		1.2	1.4	1.7	
Bread, 10 oz.,		26.1	3.7	150.8	
Butter, $\frac{1}{2}$ oz.,		0.2	11.5		_
Total,		27.5	16.6	$166 \cdot 7$	1 <del>3</del> d.
Calories, 950.6					-
Protein Calories	= 112	= 12			
per cent. of tot					
Oatmeal, 8 oz.,		36.6	16.4	153.4	
Milk, 10 oz		9·4	11.3	14.2	
Total.	• • •	46.0	$\frac{}{27\cdot7}$	167.6	1 <u>1</u> d.
Calories 1133					2

Protein Calories = 188 = 16.5

per cent. of total.

The advantage of the latter is obvious. A porridge and milk diet contains the food principles in correct proportion. The protein rich animal foods, flesh, fish, eggs, &c., are all too expensive for the labouring classes, and any increase in their amount in the diet is impracticable. But cheese and the cheap protein-rich vegetable foods, oatmeal, peas, beans, &c., should be more freely used. drawback of the latter, and to the average housewife a very great one, is in the labour entailed in preparing and cooking them. But if the diet of the labouring classes is to be improved, without increasing the cost, time and labour must be expended on properly cooking these more nutritive vegetable foods.

It is probably of little avail thus to preach the value of oatmeal, and of such vegetables as peas and beans. It seems probable that only by proper instruction in schools will their value be sufficiently inculcated, while the methods of cooking them in the most palatable and most easily prepared form must be taught practically.

The free distribution of such leaflets as "How to Spend a Shilling on Food to the Best Advantage," and "How to Feed a Family of Five on 12s. 9d. a Week," prepared for Rowntree in York, might also help to aid the more intelligent housewives to better marketing. That better marketing is required is shown by the great variations in the food return for the money expended. Where one family gets nearly their minimum adequate diet for an expenditure of 5.1 pence per man per diem (XXX., Group D), others on an expediture of nearly 9 pence. fail to secure it (LVIII., Group C).

One of the most marked examples of bad marketing is seen in study LIX. (Group A), where only 265 Calories were purchased per penny, while XIX. (Group G) is an example of what knowledge and good marketing can do, 619 Calories being purchased per penny.

# III. RELATIONSHIP OF THESE DIETS TO HEALTH.

# A. Physique of Children in Relationship to Diet (see Appendix IV.).

An interesting point in connection with these studies is the influence of the diet on the physical condition of the children. co-operation with Dr. Chalmers, Medical Officer of Health, and through the kindness of Dr. Roberts, Chief Medical Officer for the School Board, the weights of a number of the children were obtained. These show very markedly the relationship between the physique and the food. When the weight is much below the average for that age, almost without exception the diet is inadequate.

A girl of eleven, whose weight is 39 lbs., is a member of a family having a diet the energy value of which is 2,312 Calories per man per day; a girl of the same weight, but only seven years of age, belongs to a family with a diet of 4,003 Calories; a girl of nine, whose weight is even less,  $37\frac{1}{2}$  lbs., belongs to a family the diet of which is only

2,329 Calories per man per day.

If we compare girls of six years of age, we find that their diets expressed as per man per day vary as follows: -One weighing 47 lbs. receives a diet of 3,215 Calories, another of weight 39 lbs. has a diet of 3,882 Calories, while a third whose diet has an energy value of

2,412 Calories weighs only 28 lbs.

The same holds good for the boys. Two boys of five years of age, whose family diets contain 4,003 and 1,978 Calories per man per The family diet of a day, weigh respectively 35 lbs. and 26 lbs. boy of  $5\frac{1}{2}$  years, whose weight is 42 lbs., contains 3,341 Calories, and that of a boy of the same age, but whose weight is only 21 lbs., contains 3,136 Calories. The latter is a boy attending the school for physically defective children. The diet is not exceptionally low, and an additional reason for the defective physique must be sought elsewhere. The family have a very bad rickety history. There are eight children, all of whom have suffered from this disease, so that in this case other factors besides the diet probably influenced the health of the children.

Dr. Chalmers (Journ. Roy. San. Inst., vol. xxvi.; 1905) has also shown that the physical development and nutrition of school children is closely related to the economic standard of the family life, and he has further shown that the mental capacity, as estimated by the

masters, is similarly graded.

Dr. (now Sir George) Newman, Chief Medical Officer of the Board of Education, in his Annual Report, 1911, says that "defective nutrition stands in the forefront as the most important of all physical

defects from which school children suffer." He emphasises the improvement in physique and mental capacity of those children whose diet, by means of free meals, has been raised to the standard.

# B. RICKETS IN RELATIONSHIP TO DIET (see Appendix V.).

The prevalence of rickets among the poorer classes suggested the enquiry how far this disease is definitely associated with an insufficient diet. The housing factor is of importance in this connection, but the frequent removals render it difficult to determine its influence accurately. In this investigation the diet has been mainly considered.

A study of the diets of families in which one or more of the children suffer from rickets shows that these are not necessarily the ones with the lowest energy value.

AVER	AGE E	NERGY VALUE.		
			Lower	Upper
		Average	Limit.	Limit.
Rickety Families,		3147	2329	4003
Non-rickety Families,		3164	2113	4253

# PERCENTAGE OF RICKETY FAMILIES IN RELATIONSHIP TO THE ENERGY VALUE OF THE DIET.

Energy Value.	Rickety Families.	Non-rickety Families.
Below 3,000 Calories, ·	5 = 35.8 per cent.	21 = 45.6 per cent.
Between 3,000 and 3,500 Calories,	7 = 50.0 ,,	13 = 28.3 ,,
Above 3,500 Calories	2 = 14.2	12 = 26.1

The average energy value of the diets of the rickety families is 3,147 Calories. Only two of these fourteen families fall very far short of the minimum of 3,000 Calories. In both these the children are considerably below the average weight, and suffer from a want of nourishment. In most of the others the tendency to rickets is not a family trait, but an individual occurrence. In these cases the mother usually has some explanation to offer, e.g., that the child suffered from catarrh of the stomach, or that the mother went out working during pregnancy, &c. Probably where there is any suggestion of rickets or fear of its occurrence the diet should be an abundant one; but this, as we have seen, is too seldom obtained. Of the families studied, 62 per cent. of those whose weekly wage is irregular or below 20s. have below the minimum of 3,000 Calories.

The protein content of the diets of rickety and non-rickety families shows no very marked difference, although again the diets of the latter show a more liberal supply.

#### AVERAGE PROTEIN CONTENT.

			Lower	Upper
		Average.	Limit.	Limit.
Rickety Families,		108.2	64.0	138.2
Non-rickety Families,	. 141	111.6	73.0	186

# PERCENTAGE OF RICKETY FAMILIES IN RELATIONSHIP TO THE PROTEIN CONTENT OF THE DIET.

Protein Content	·•	Rickety	Families.	Non-rickety Families.
Below 125 grams,		$12 = 85.7$	per cent	33 = 71.7 per cent.
Above 125 grams.		$2 = 14.3$	,,	$13 = 28 \cdot 2$ ,,

The fat content of the diets of the families in which there is rickets is on the whole lower than that of the others. The average for the 14 rickety families is 72.8 grms.; for all the others 86.0 grms. The highest fat content in any of these 14 is 88.5 grms., and in 6 of them it is under 70 grms.

#### AVERAGE FAT CONTENT.

		Average.	Lower Limit.	Upper Limit.
Rickety Families,	 	72.8	49	88.5
Non-rickety Families,	 	86.0	43	133

# PERCENTAGE OF RICKETY FAMILIES IN RELATIONSHIP TO THE FAT CONTENT OF THE DIET.

Fat Content.		Rickety Families.	Non-rickety Families.
Below 90 Grams,	 	14 = 100 per cent.	36 = 74.0 per cent.
Above 90 Grams,	 		12 = 26.0 ,,

In connection with the prevalence of rickets the question of over-crowding is of interest. If a comparison is made of the number of people and the size of the houses, it is found that in the non-rickety households there are on an average 2.9 people to a room, in the rickety households 3.9 people to a room. Otherwise, in the non-rickety households the allowance per person is one-third of a room, in the rickety households the allowance per person is only one-quarter of a room. Dr. Maegregor, in his report on "The Physique of Glasgow Children." finds that the incidence of rickets among children from one and two-apartment houses is much greater than among children from larger houses.

These results are of interest in view of the different opinions as to the cause of rickets. Probably both factors—the lack of fat in the diet and the want of sufficient air space—are to be held responsible for the prevalence of this disease among the poorer labouring classes.

The data are not sufficient for the discussion of the position of the child in the family or the question of artificial feeding in infancy as a supplementary cause of rickets.

# IV. EXPENDITURE ON RENT AND FOOD AND THE SURPLUS AVAILABLE FOR OTHER EXPENSES.

In the labouring classes the main items of expenditure are food and rent. These are absolutely essential, and are of the first importance. A certain amount must be spent on clothes, and the money saved in funeral societies and sick societies ranks almost as a necessary expenditure. The surplus available among the really poor after these

expenses have been met is very small indeed, and in many cases the money for societies and clothes has to be found by reducing the food bill, which is already as low as is consistent with the maintenance of health.

A comparison of the percentage of the income expended on rent and food in the different groups of families shows, as one would expect, an increase in the percentage of each as the income decreases.

	Expended on Rent, per cent. of Income.	Expended on Food, per cent. of Income.	Surplus, per cent. of Income.
A, B, C, income regular above 25s.,	11.0	61.9	$27 \cdot 1$
D, E, income regular under 25s.,	15.3	67.3	17.4
F, G, income irregular,	16.0	75.5	8.5
H, income irregular, father drinker.	17.9	86.9	-4.8

A consideration of these figures enables us to realise the keenness of the struggle to make ends meet in the poorer houses, even with a regular income. After the charges for food and rent have been met, a sum of only 3s. to 4s. a week is left for all other expenses—clothing, fuel, taxes, amusements, &c.

In families where the income is irregular the amount available for general expenses is even smaller. These, however, are generally paid out of the greater surplus in a "good" week. The rent, although calculated as a weekly expenditure, is usually paid monthly, and as no effort is made to save for it, the diet in rent week is abnormally low-

Where there is even a moderate expenditure on alcohol practically the whole of the available money is required for food. The rent, as a rule, in such cases is much in arrear.

One cannot fail to be struck by the self denial represented by these figures. The support of the family and the provision of even the barest necessaries of life prevent the attainment of any variety and interest in life, and almost enforce a monotonous existence.

#### V. A COMPARISON OF URBAN AND RURAL DIETS.

The following tables show a comparison between Urban and Rural diets in the United Kingdom. The figures of the Rural diets were calculated for Professor Nöel Paton from the Board of Trade returns in 1904. [Memorandum on Consumption and Cost of Food in Workmen's Families in the United kingdom (Cd. 2337), 1904]:—

#### URBAN DIETS.

		Edinburgh.	Glasgow.	Dublin.	York.
Protein,		107	110	98	99
Fat,		88	80	90	80
Carbohydrates,		479	475	468	386
Calories,	• • •	*3,228	3,163	3,107	†2,685

<sup>\*</sup> A-typical diets not included.

<sup>+</sup> Slightly too low owing to miscalculation of composition of flour.

RURAL DIETS.

		England. E. Counties.	Scotland. N. Counties.	Ireland.
Protein,	 	100	124	98
Fat,	 	76	81	57
Carbohydrates,	 	578	570	586
Calories,	 :	3,480	3,601	3,337

The energy value obtained by the rural classes is distinctly higher than that got in the towns.

This difference is chiefly due to the carbohydrate content, which in the country districts is much greater. In the English and Irish counties the fat content is very low, lower than in the cities.

The figures for the Scottish cities agree very closely. The protein content, as well as the energy value, is more satisfactory than in the English town. In the latter the carbohydrate content is very low. In both the English and Irish cities the protein is considerably below the requisite amount.

The cost per man per diem in York is only 5.9 pence, compared with 7.1 pence for the two Scottish cities. This lower expenditure in England on food leaves a larger surplus for heat, lighting, clothing, amusements, &c. In the American cities this is even more marked, and there is a considerable balance after paying rent and food.

1	New York.	York.	Edinburgh.	Glasgow.
Rent per cent. of income,	15	18	13	13
Food do. do.,	35	51	62	65
Other expenses per cent.	~ ^	0.1	25	22
of income,	50	31	20	
Cost per man per diem,	10.05	5.93	7.29	7.07

In spite of the fact that in New York the rent is nearly three times that paid by the labouring classes in the United Kingdom, and that food is more expensive in New York, the sum available for clothing, light, amusements, &c., in the United Kingdom is only about one-fourth of what it is in New York.

These figures bear out the conclusion arrived at from our study of the Glasgow diets. They show that in the United Kingdom among the labouring classes, urban and rural, the wages are frequently so low that, after providing the barest necessities of life, little or nothing is left for amusements, travel, or other amenities. It is to be feared that in the face of old established dietary habits, of ignorance, and of the stultifying influence of the surroundings, any reform in the mode of feeding which might set free a greater proportion of the income will only be slowly achieved as the result of proper teaching and training in the schools.

#### APPENDICES.

- I. GENERAL STATISTICS.
- II. SCHEDULES FOR EACH FAMILY—TOTAL FOOD CONSUMED.
- III. Schedules for each Family—Food Consumed per Man per Diem.
- IV. PHYSICAL CONDITION OF CHILDREN.
- V. DIETS OF RICKETY FAMILIES—PER MAN PER DAY.
- VI. COMPOSITION OF FOOD-PERCENTAGE.



## APPENDIX I.

# General Statistics of Families Studied.

N		Number	IN FAMI	LY.	Expendi Foo		Energy of Food	Protein of Food	Expended		Income.
Number of Study and Group.	Over 16.	Under 16.	Total.	Equiva- lent to Men.	Total per Week.	Per Man per Diem in Pence.	per Diem	per Man per Diem in Grms.	on Rent per Week.	No. of Rooms.	Approximate
B, I., D, III., B, IV., K, VI., K, VII., K, VIII., F, IX., L, XI, D, XII., H, XIV., - B, XVI., E, XVIII., - G, XXXVI., - E, XXVII., - E, XXVIII., - D, XXXX., - F, XXXII., - A, XXIII., - B, XXVII., - E, XXVIII., - D, XXXX., - F, XXXII., - A, XXXIII., - D, XXXX., - F, XXXII., - A, XXXIII., - D, XXXXVI., G, XXXVII., - E, XLII., - A, XLIII., - E,	5224246436233334023232232231	153803434533563254417156564458431255   26352462244356353356455	67521277768555896676639478786671069447773410684795676597585588686	$5 \cdot 29 \cdot 93 \cdot 79 \cdot 67 \cdot 74 \cdot 86 \cdot 150 \cdot 168 \cdot 145 \cdot 799 \cdot 54 \cdot 750 \cdot 83 \cdot 32 \cdot 719 \cdot 682 \cdot 197 \cdot 607 \cdot 951 \cdot 400 \cdot 864 \cdot 999 \cdot 84 \cdot 53 \cdot 245 \cdot 197 \cdot 607 \cdot 951 \cdot 100 \cdot 864 \cdot 999 \cdot 84 \cdot 53 \cdot 245 \cdot 197 \cdot 607 \cdot 951 \cdot 1007 \cdot 864 \cdot 152 \cdot 1007 \cdot$	38/113 16/5 10/10 48/14 37/44 27/113 33/63 24/33 19/94 15/6 14/75 24/03 16/3 19/8 27/74 15/25 14/83 21/4 28/75 12/104 15/25 14/83 18/03 21/4 28/75 11/75 12/23 11/75 12/23 11/75 12/23 14/23 15/14 17/104 18/83 19/14 24/15 13/114 10/83 19/8 21/4 24/15 13/114 12/8 20/4 18/24 18/24 18/24 19/85 21/4 24/15 18/45 19/85 21/4 24/15 18/16 18/16 21/10 18/16 1	11·53 6·17 5·86 8·71 8·0 7·81 10·87 6·77 7·0 5·66 7·96 7·54 6·98 4·29 6·73 10·22 6·74 6·20 13·46 6·21 12·26 6·94 3·94 4·93 7·19 8·21 4·59 6·63 5·16 6·29 5·35 8·12 7·36 6·67 8·12 7·36 8·12 7·36 8·12 7·36 8·12 7·36 8·12 8·12 8·12 8·13 8·14 8·14 8·14 8·14 8·14 8·14 8·14 8·14	3477 4003 2891 3882 3305 2824 4149 2701 2485 2436 3473 3407 3181 2691 2936 3683 2931 3248 3820 5389 2329 3948 3741 2413 2350 3144 3858 2761 3820 3136 3116 2949 3135 3823 3242 4092 2134 2854 3423 3215 2723 2772 3090 4255 2934 2822 2955 2113 3341 3471 3053 2635 2550 3282 2686 3304 2974 3030 1979 3849	125·3 135·3 83·2 138·2 115·0 96·8 145·3 80·2 78·5 103·4 124·7 134·4 115·0 91·3 97·8 124·2 103·0 107·2 131·7 185·8 90·9 176·0 123·7 64·0 82·6 112·0 129·0 96·4 141·5 108·5 128·3 99·8 97·8 126·1 107·2 134·8 77·7 102·1 111·2 110·3 112·8 98·9 120·2 147·1 88·5 97·0 87·9 72·6 121·7 122·2 10·2 108·1 90·6 112·9 102·2 110·3 113·1 106·4 84·8 108·3	4/2 3/6 2/4/4 2 3/6 4/3 3/7 12 1 34 2 12 12 3/6 4/3 3/7 12 12 3/6 4/3 3/7 12 12 12 3/6 4/3 3/7 12 12 12 12 12 12 12 12 12 12 12 12 12	3213334622222222222222222222222222222222	£3 0 2 1 3 0 1 2 0 2 10 8 1 19 0 1 11 0 1 15 0 1 18 6 1 2 10 1 18 0 1 10 0 1 18 0 1 0 0 1 3 0 1 10 0 1 3 0 0 18 11 1 5 0 1 16 0 0 15 0 0 18 0 1 0 0 1 15 0 0 17 0 1 4 6 1 0 0 1 5 0 1 1 6 1 0 0 1 7 0 1 4 6 1 0 0 1 7 0 1 4 6 1 0 0 1 7 0 1 4 6 1 0 0 1 7 0 1 1 6 1 5 0 1 7 0 0 14 0 0 17 0 2 1 0 1 16 0 0 17 0 2 1 0 1 1 6 1 5 0 1 7 0 0 14 0 0 17 0 2 1 0 1 14 6 2 2 0 0 13 0 1 14 6 2 2 0 0 13 0 1 14 0 0 17 0 2 1 0 1 10 0 1 12 0 2 1 0 1 14 0 0 17 0 2 1 0 1 10 0 1 12 0 2 1 0 1 14 0 0 15 10 1 1 6 1 5 0 1 7 0 0 14 0 0 15 10 1 1 6 1 5 0 1 7 0 0 14 0 0 17 0 2 1 0 1 10 0 1 12 0 2 1 0 1 14 0 0 15 10 1 1 6 1 5 0 1 7 0 0 1 4 0 0 1 7 0 2 1 0 1 1 0 0 1 0 0 1

#### APPENDIX II.

# No. I.

			WEIGHT	USED.	
KIND OF FOOD MATERIAL.	Total Cost	Total Food		Nutrients	
KIND OF TOOD MATERIAL.	in Shil- lings.	Material	Duration	Fat	4 1 1 1 1
	1111821	in Grams.	Protein in Grams.	in Grams.	Carbohydrates in Grams.
				100.40	
Animal.—Eggs	7.75 4.23	$\begin{array}{c} 4725 \\ 1618 \cdot 02 \end{array}$	$\begin{bmatrix} 562.27 \\ 16.18 \end{bmatrix}$	$\frac{439.42}{1375.3}$	_
Butter Cheese	1.21	681.75	188.84	250.88	27.95
Milk	$  \hat{2}\cdot\hat{17}  $	9656.0	318.65	386.24	482.8
Buttermilk	•58	3976.0	119.28	19.88	190.85
Findon haddock	21	286:33	46.1	1.09	
Beef and bones	5.91	3581.46	666.15	712·71 359·47	109.07
Sausages	2.04	$1536.2 \\ 2249.77$	$\begin{bmatrix} 262.69 \\ 510.7 \end{bmatrix}$	589.44	
Bacon	± /				
	28.80	28310:53	2690.86	4134.43	810.67
VEGETABLE.—Bread		12839.62	1181.24	166.91	6817.84
Scones		4531:36	480:32	348.91	1454·57 597·32
Flour	.05	795:37	90.67	$egin{array}{c} 7.95 \ 57.27 \ \end{array}$	536.87
Meal	-177	$oxed{795.37} \ 454.5$	36.36	1:36	359.05
$egin{array}{cccccccccccccccccccccccccccccccccccc$	1.17	11394.31	205.1	11.39	1674.96
Potatoes Carrots, &c	.177	2840.62	25.56	5.68	210.2
Sugar	1.47	4658.62	_		4658.62
	8.41	38309.77	2147:30	`599.47	16309 • 43
Total	37.21	66620.3	4838.16	4733.9	17120.10
	No	o. II.			1
Animal.—Eggs	. 25	200.0	23.8	18.6	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,00	1360.8	13.61	1156.68	10.90
Cheese		399.17	110.57	146·89 4·54	16.36 $495.56$
Condensed milk	.83	1134·0 1417·5	$\begin{vmatrix} 130.41 \\ 46.78 \end{vmatrix}$	56.70	70.87
Milk	•75	340.2	77.22	89.13	
Bacon Haddock	•41	2667.17	224.04	5.33	
Haddock Herring	.00	567.0	63.50	22.11	
Halibut	1 .17	1814.4	277.60	79.83	
Cod	.   -	285.77	47·72 232·86	249.14	
Beef	.50		107.50	83.92	
Mutton Mince	1.0	907.2	162.39	282.14	
IIIII III	7.06	12798.75	1518.00	2195.87	582.79
		20670.55	1901.69	268.72	10976:00
A DOMESTIC PROPERTY.	$\begin{vmatrix} 4.79 \\ .5 \end{vmatrix}$	1306:37	138.47	100.59	419.3
7733			184.09	16.15	
73. 1	08	226.8	19.28	2.49	
70.1	\ 17		$\frac{36.29}{18.26}$	1 ·36 8 · 16	
9	08		116.35		
	58		24.25		199:3
Ottor = 0 ,	· 09		34.59		87.1
~	1.1	7 3628.8	_		3628.8
Sugar	$\begin{bmatrix} \vdots & \ddots & \ddots & \ddots \\ \vdots & \ddots & \ddots & \ddots \end{bmatrix}$		1:36	<u> </u>	
- 11					
Jelly	8.2	0 37539.94	2474.63	410.96	18276.6

No. III.

	1	]	WEIGHT	USED.	
	Total Cost			Nutrient	S.
KIND OF FOOD MATERIAL.	in Shil- lings.	Total Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Animal.—Eggs Butter Cheese Milk Milk (eonder Haddock Herring (free Cod Beef Minee	sh) ·29 ·25 ··· ·29 ··· ·83 ··· ·29	500 540 · 85 59 · 08 3408 · 0 454 · 5 454 · 5 909 · 0 454 · 5 454 · 5 227 · 25	59·5 5·41 16·36 112·46 52·27 38·18 101·81 75·9 84·54 40·68	46.5 459.72 21.74 136.32 1.95 .91 35.45 1.36 90.44 70.67	2·42 170·40 198·61 — — —
	4.77	7462.18	587.11	865.06	371.43
Vegetable.—Bread Meal Rice Potatoes Onions Sugar Jam	2·44 ·04 ·35 ·83 ·12 ·60 ·81	9658·12 86·35 963·54 6708·42 340·87 1899·81 1336·23	888·55 13·90 77·08 120·75 4·77 — 8·02	125·55 6·22 2·89 6·71 1·02 — 1·34	5128·46 58·29 761·20 986·41 30·34 1899·81 1129·11
	5.19	20993:34	1113:07	143.73	9993.62
Total	9.96	28455 52	1700:18	1008.79	10365.05
	No	. IV.			
Animal.—Butter Cheese Milk Findon hadd Haddoek Herring (free Beef Sausages Pork Ham Minee	75	$\begin{array}{c} 968\cdot08\\ 340\cdot87\\ 24424\cdot0\\ 1363\cdot5\\ 1363\cdot5\\ 2981\cdot52\\ 7612\cdot87\\ 368\cdot14\\ 1363\cdot5\\ 1136\cdot25\\ 340\cdot87\\ \end{array}$	9·68 94·42 805·99 219·52 114·53 333·93 1415·99 62·95 182·7 257·93 61·01	$\begin{array}{c} 822.87 \\ 125.44 \\ 976.96 \\ 5.18 \\ 2.73 \\ 116.28 \\ 1514.96 \\ 86.14 \\ 329.97 \\ 297.70 \\ 106.01 \\ \end{array}$	13·97 1221·20 — — — — — 26·14 —
	25.26	42263·10	3558.65	4384.24	1261 · 31
VEGETABLE.—Bread Seones, &e. Meal Barley Corn flour Potatoes Cabbage	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	36246·37 5199·47 2867·89 227·25 172·71 38296·17 9449·05	3334·67 551·14 461·73 19·32 12·26 689·33 132·29 5200·74	471·20 400·36 206·49 2·5 2·24 38·30 18·90 1139·99	19246·82 1669·03 1935·82 176·80 135·40 5629·54 453·55
Total	42.78	134722.01	8759:39	5524 ·23	30508 •27

No. V.

	140	*			
			WEIGHT U	JSED.	
KIND OF FOOD MATERIAL.	Total Cost	Total Food		Nutrients	
KIND OF TOOD MAINTAIN	in Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Animal.—Eggs	$\frac{1}{2\cdot 33}$	2100	249.9	195.3	
Butter	3.21	1204.42	12.04	1023.76	_
3AC211.	3.5	15904.0	524.83	636 16	795 20
TT 1	17	399.96	94.79	13.60	
TT 11 1	.75	2499.75	209.98	5.0	
731 1	.75	2499.75	159.98	7.5	
Chicken	3.41	2131.60	292.03	262.19	
T 2	.83	1818.0	367.24	56.36	45.45
Mince	4.75	1631.65	292.06	507.44	
Beef	1.25	654.48	121.73	130.24	
	20.95	30843.61	2324.58	2837:55	840.65
T. Durad	4.0	21816.0	$\left  \frac{1}{2007 \cdot 07} \right $	283:61	11584:30
VEGETABLE.—Bread Scone	1.66	3408.75	361.33	262.47	1094.21
	3.12	8467:33	965.27	84.67	6358 96
Flour Rice	17	454.5	36.36	1:36	359.05
D / /	1.95	11021.62	198.39	11.02	1620 18
0.11	.177	1108.98	15.52	2.22	53.23
0	.05	1363.5	19.09	4.09	121:35
Unions Haricot beans	-14	227.25	51.13	4.09	1 <b>3</b> 5·44
Cucumber	•00	140.89	•99	•28	3.66
Tomatoes	.00	113.62	1.02	'45	4.43
Raisins	-04	59.08	1.35	1.77	40.47
Sugar	1.05	5508.54	II		5508.54
Arrowroot	-17	168.16	! -		163.11
Oil	•00	59.08		59.08	-00.50
Yeast	. 21	140.89	16.48	.56	29.59
	14.07	54058·19	3674.0	715.67	27076:52
Total	. 35.02	84901.80	5998.58	3553.22	27917.17
	No	o. VI.			
Animal.—Eggs	. 1.37	950.0	113.05	88.35	_
Butter	. 3.93	1531.66	15.32	1301.91	450.0
Milk	1.09	8520.0	281.16	340.8	456.0
Buttermilk	. 41	2840.0	85.20	14.2	136.32
Cod ··	1.25		379.51	6.82	
Herring	·29		188.50	27.04	
Chicken	2.75		194.89	453.13	
Steak	$\cdot \mid 2.75$		423.53	99.97	30.33
Sausages	. 66		122.03	212.02	
Mince			1876.25	2719.22	592.65
	16.28		_		5613:56
VEGETABLE.—Bread	2.78	10571.67	972.59	137.43	1507.09
	1.37	7 4694.98	497.67	361.5	406.18
Flour	17		61.66	86.06	
Meal	79		192.45		75.22
200	.08		145.70	1 000	
Potatoes .			1.97	100	12:54
Onions	-01		102.26	1	270.88
Haricot beans .	•0	1	7.76	0.00	28.83
0 400			3.60	1	124.39
	1.00				4545.0
~ ~ ~	-10	0 40 OH	2.04	•34	
0 0000		-07 FO	-	281.79	
Oil ·	9.8	10000 10	$- _{2006\cdot 67}$	899.73	14868:48
Total	$\frac{3}{26\cdot 1}$		3882.92	3618.95	15461-13
10001	W.	W.			

# No. VII.

		140.				
				WEIGHT	USED.	
KIND OF FOOD MATERIAL.		Total Cost	Total Food		Nutrients	3.
KIND OF FOOD MATERIAL.		in Shillings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams,
Animal.—Eggs Butter Milk Mackerel Haddock Flounders Herring Chicken Beef Mince		1 0 4·46 2·83 ·5 1·25 ·83 ·17 5·33 2·41 2·0	600·0 1818·0 13064·0 1649·83 3867·79 2613·37 399·96 4004·14 1790·73 1590·75	71·4 18·18 431·11 168·28 324·89 167·25 94·79 548·57 333·07 284·74	55·8 1545·3 522·56 69·29 7·73 7·84 13·60 492·51 356·35 494·72	653·2 /
		20.78	31398.57	2442:28	3565.70	653.2
Vegetable.—Bread Rolls, &c. Flour Meal Rice Potatoes Cabbage Sugar Jam Oil		4·17 1·25 ·5 ·5 ·21 1·56 ·08 1·5 ·41 ·83	16362·0 4176·85 1590·75 1590·75 568·12 12048·79 595·39 4090·5 509·04 454·5	1505·3 442·75 181·34 256·11 45·45 216·88 8·33 — 3·05	212·71 321·62 15·91 114·53 1·70 12·05 1·19 — ·51 454·5	8688·22 1340·77 1194·65 1073·76 448·81 1771·17 28·58 4090·5 430·14
		11.01	41986:69	2659:21	1134.72	19066.60
Total		31·79	73385 ·26	5101.49	4700.42	19719:80
		110.	V 111.	1	1	1
Animal.—Eggs Butter Milk Cheese Herring Haddock Flounders Beef Dripping		1:75 2:48 2:66 :41 :25 1:0 :66 3:41 :68	1050·0 854·46 11928·0 454·5 399·96 2727·0 1363·5 1849·81 736·29	124·95 8·54 393·62 125·9 94·79 229·07 87·26 344·06	97.65 726.29 477.12 167.26 13.60 5.45 4.09 368.11 719.35	596·4 18·63 — — — —
		13.30	21363:52	1408.19	2578.92	615.03
Vegetable.—Bread Rolls, &c. Rice Potatoes Cucumber Sugar		2·64 2·0 ·33 1·62 ·12 2·25 8·96	11221·6 3917·79 909·0 12980·52 140·89 5367·64 34537·44	$ \begin{array}{c c} 1032 \cdot 39 \\ 415 \cdot 28 \\ 72 \cdot 72 \\ 233 \cdot 65 \\ \cdot 99 \\ - \end{array} $ $ 1755 \cdot 03$	$egin{array}{c} 301.67 \\ 2.73 \\ 12.98 \\ -28 \\ - \end{array}$	1257·61 718·11 1908·14 3·66 5367·64
Total	•••	22.26	55900.96	3163.22	2 3042:46	5 15828.80

## No. IX.

			WEIGHT	USED.	
KIND OF FOOD MATERIAL.	Total Cost in Shil-	Total Food		Nutrients	s.
	lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams,
Animal.—Eggs Butter	1.66	900.	107.1	83.7	
M;11-	$egin{array}{c c} 2.62 \ 1.17 \ \end{array}$	995.35	9.95	846.05	312.4
Bacon	1.41	$6248.0 \\ 822.64$	$\begin{vmatrix} 206.18 \\ 186.74 \end{vmatrix}$	249.92 $215.53$	917.4
Pork	66	795:37	106.58	192.48	_
Beef	3.66	2217.96	412.54	441.37	
Sausages	1.91	1804.36	308.54	422.22	128.11
	13.09	13783.68	1337.63	2451 27	440.51
VEGETABLE.—Bread	1.93	7753 <sup>.</sup> 77	713.34	100.80	4117:25
Flour	.37	1195.33	136.27	11.95	897.69
Corn flour	.08	113.62	8.07	1.48	89:08
Rice	.08	172.71	13.82	.52	136:44
$egin{array}{ccccc} \operatorname{Meal} & \dots & \dots \\ \operatorname{Potatoes} & \dots & \dots \end{array}$	1.17	481.77	77.56	34.69	325.19
Cabbaga	1.17	11526·12 1877·08	207.47	11:53	1694:34
Onions	08	340·87	26.28	$3.75 \\ 1.02$	90·10 30·34
Turnips	.04	568.12	5.11	.57	32.38
Sugar	1.7	3122:41	_		3122.41
Sago	.08	140.89	12.68	•56	110.03
	5.78	27292.69	1205:37	166.87	10645.25
Total	18.87	41076:37	2534.00	2618.14	11085.76
	No	. X.			
Animal.—Eggs	•37	300.0	35.70	27.90	<b>→</b>
Butter	1.66	577.21	5.77	490.63	18.63
Cheese Condensed milk	·83	$\begin{array}{c} 454.5 \\ 227.25 \end{array}$	125·89 26·13	$167.25 \\ \cdot 91$	99.31
Herring (fresh)	.25	513.58	57.52	20.03	<i>33 31 →</i>
Findon haddock	1.70	4717.71	759.55	17.93	_
Haddock	'64	3522:37	295.88	7.04	_
Beef	2.25	2440.66	453.96	485.69	
Mince	1.0	909.0	162.71	282.70	72.61
$egin{array}{cccc}  ext{Sausages} & \dots & \\  ext{Dripping} & \dots & \end{array}$	1:37	$1022.62 \\ 199.98$	174.87	239·29 195·38	72.01 →
	10.36	14884.88	2097.98	1934:75	190.55
Warran D. 1	9.00	14544-0	1220.05	189.07	7722:86
VEGETABLE.—Bread Flour	3.66	14544·0 681·75	1338.05	6.82	511.99
Flour Barley	.04	113.62	9.66	1.25	88.39
Macaroni	1.25	2272.5	304.51	20.45	1683:92
Potatoes	1.0	12726.0	229.07	12.72	1870.72
Peas	.04	59.08	14.53	.59	36.63
Cabbage	.33	4263.21	59.68	$\begin{bmatrix} & 8.52 \\ 2.30 \end{bmatrix}$	204·63 68·36
Onions	1.29	768·10 2331·58	10.73	2 30	2331.58
Sugar Tomatoes	.75	340.87	3.07	1.36	13.29
	8.70	38100.71	2047.04	243.08	14532:37

## No. XI.

		•	WEIGHT	USED.	
27 25	Total Cost	Total Food		Nutrients	
KIND OF FOOD MATERIAL.	in Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Animal.—Butter Cheese Milk Cod Fish suppers Ham Beef Mutton Corned beef Mince Sausages	.58 .17 .75 .41 1.5 .17 1.0 .37 .25 .37 1.66	$   \begin{array}{r} 340.87 \\ 113.62 \\ 3408.0 \\ 909.0 \\ 2577.01 \\ 113.62 \\ 909.0 \\ 454.5 \\ 227.25 \\ 227.25 \\ 1818.0 \\ \hline  \end{array} $	3·41 31·47 112·46 151·80 193·27 25·79 169·07 107·71 32·49 40·68 310·88	289·74 41·81 136·32 2·73 177·81 29·77 180·89 84·08 54·08 70·67 425·41	-4.66 170.40 -613.33 
VEGETABLE.—Bread Rolls Macaroni Rice Potatoes Onions Sugar Jelly Tomatocs	2·77 1·08 1·25 ·17 ·12 ·21 1·12 ·41 ·37	10453·50 2222·50 2272·5 454·5 1590·75 909·0 2045·25 304·51 454·5	961·72 235·58 304·51 36·36 28·63 12·72 — 1·83 4·09	135·89 171·13 20·45 1·36 1·59 2·73 — ·30 1·82	5550·81 713·42 1683·92 359·05 233·84 80·90 2045·25 257·31 17·72 10942·22
Total	14.73	31805.13	2764.47	1828.58	11859.68
	No	XII.			
Animal.—Eggs  Butter Cheese Milk Buttermilk Ham Cod Becf Mutton Sausages Black pudding	·25 ·33 ·33 ·2·95 ·37 ·25	$\begin{array}{ c c c }\hline 1704.0 \\ 227.25 \\ 909.0 \\ 2958.79 \\ 454.5 \\ 227.25 \\ 227.25 \\ \end{array}$	107·1 4·0 94·42 187·44 51·12 51·58 151·80 550·33 107·71 38·86 7·27 1351·63	227·20 8·5 59·54 2·73 588·80 84·08 53·17 36·81	16·13 9·32
Vegetable.—Bread Scones, &e Barley Meal Potatoes Cabbage Carrot Peas Onions Sugar	.   '666 . '044 . '41 . '47 . '21 . '04 . '08	1363·5 227·25 1590·75 6481·17 2976·97 881·73 227·25 227·25 1818·0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	104·99 2·50 114·53 6·48 5·95 1·76 2·27 68	437.68 176.80 1073.75 8 952.73 142.89 65.25 140.89 20.22 1818.0
Total	. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	10276.24	2958.65	5 1984.98	8 10784.23

#### No. XIII.

	140.	AIII.			
			WEIGH	r used.	
KIND OF FOOD MATERIAL.	Total Cost in Shil-	Total Food		Nutrient	s.
	lings.	Material in Grams.	Protein in Grams	Fat in Grams	Carbohydrates in Grams.
Animal.—Eggs Butter		1800.0	214.20	167:40	_
Chann	. 1.66	654.48	6.54	556:31	
Milk (condensed	29	427·23 368·14	118.34	157.22	17.51
Milk	$1.\overline{0}$	4544.0	$\begin{array}{ c c c c c }\hline & 42.33 \\ & 149.95 \\ \hline \end{array}$	181.76	160.88
Haddock	.07	454.5	38.18	91	227.20
Findon haddock	•21	454.5	73.17	1.73	
Ham		1590.75	361.10	416.77	
Pork		454.5	60.90	109.99	_
Dripping Liver		172:71		168.74	
Mutton	.177	$227.25 \\ 113.62$	45.90	7.04	5.68
Sausages	. 75	681.75	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{vmatrix} 21.02 \\ 159.53 \end{vmatrix}$	48:40
Mince	1.10	1022.62	183.05	318.03	40 40
Beef	. 2.25	2336.13	434.52	464.89	_
	14.06	15302.18	1871.69	2732.81	459 67
VEGETABLE.—Bread	4.58	19998:0	1839.81	259.97	10618:94
Scone	.33	968.08	102.61	74.54	310.75
Meal	.5	1704:37	274.40	122.71	1150.45
Flour	-21	768.10	87.56	7.68	576.84
Barley	.08	227.25	19.31	2.50	176.80
Potatoes Turnip	*81 *21	10821:64	194.79	10.82	1590.78
Cabbaga	.10	3072.42 $1877.08$	27.65 26.28	3.07	$175.13 \\ 90.10$
Peas	.10	313.60	77.14	3.13	194.43
Sugar	1.00	2586.10		-	2586.1
Jam		454.5	2.73	•45	384.05
Raisins		227.25	5.22	6.82	155.66
Currants		227.25	5.45	3.86	168.62
m	8.96	43245.64	2662.95	499.30	18178.65
Total	23.02	58547.82	4534.64	3232·11	18638:32
	No.	XIV.			
Animal.—Butter	1.46	1195.33	11.95	1016.03	
Cheese	1 17	113.62	31.47	41.81	4.66
Milk	1.0	4544.0	149.95	181.76	227.20
Herring	25	399.96	94.79	13.60	-
Ham	175	340.87	77:38	89·31 84·36	_
Dripping Liver	12	$86.35 \\ 1163.52$	235.03	36.07	$\frac{-}{29.09}$
Beef	-5	627.21	116.66	124.81	
Mince	1.25	1136.25	203:39	353.37	
	5.20	9607:11	920.62	1941.12	260.95
VEGETABLE.—Bread	6.87	25279 29	2325.69	328.63	13423:30
Biscuits	1 17	172:71	18:31	13.30	55·44 1055·35
Meal Potatoes	41	1563·48 8130·00	$\begin{vmatrix} 251.72 \\ 146.36 \end{vmatrix}$	112:57 8:13	1195.25
Potatoes Turnips, &c	12	1931.62	17.38	1.93	110.10
Lentils	17	454.5	116.80	4.54	269.06
Onions	.08	454.5	6.36	1:36	40.45
Haricot beans	25	454.5	102.26	8.18	$270.88 \mid 1390.77 \mid$
Sugar Marmalade	.70	1390·77 736·29	4.42		622.16
	9.89	40568.66	2989:30	479:37	18432:76
Total	15.39	50175.77	3909.92	2420.49	18693.71

## No. XV.

	140	• AX V •			
			WEIGHT	USED.	
KIND OF FOOD MATERIAL.	Total Cost	Total Food		Nutrient	s.
	in Shillings.	Material in Grams.	Protein in Grams	Fat in Grams.	Carbohydrates in Grams.
Animal.—Eggs  Butter Milk Buttermilk Ling fish Findon haddock Ham Mutton Beef Sausages Black pudding	1·29 3·70 1·17 ·12 ·41 ·25 1·0 ·5 1·17 ·75 ·17	850·0 1418·04 5112·0 1136·0 854·46 513·58 454·5 854·46 1108·98 681·75 227·25	101·15 14·18 168·69 34·08 162·35 82·68 103·17 202·51 206·27 116·58 7·27	79·05 1205·33 204·48 5·68 3·42 2·05 119·08 158·07 220·68 159·53 36·81	255·60 54·53 — — — — 48·40 9·32
	10.53	13211.02	1198.93	2194.18	367.85
VEGETABLE.—Bread  Rolls Meal Flour Barley Potatoes Carrot Cabbage Peas Beetroot Lentils Sugar Jam	2·91 ·33 ·41 ·29 ·17 ·46 ·21 ·12 ·08 ·25 ·33 ·366	$\begin{array}{c} 10567 \cdot 12 \\ 681 \cdot 75 \\ 1308 \cdot 96 \\ 968 \cdot 08 \\ 454 \cdot 5 \\ 5594 \cdot 89 \\ 3154 \cdot 23 \\ 1877 \cdot 08 \\ 227 \cdot 25 \\ 627 \cdot 21 \\ 909 \cdot 0 \\ 3322 \cdot 39 \\ 454 \cdot 5 \\ \end{array}$	972·17 72·26 210·74 110·36 38·63 100·71 28·39 26·28 55·90 8·15 233·61	137·37 52·49 94·24 9·68 5·0 5·59 6·31 3·75 2·27 ·63 9·09 —	5611·14 218·84 883·55 727·03 353·60 822·45 233·41 90·10 140·89 48·29 538·13 3322·39 384·05
	7.22	30146.96	1884.47	330.96	13373.87
Total	17:75	43357.98	3083:40	2525.14	13741.72
	No.	XVI.			
Animal.—Eggs  Butter  Milk  Ham  Pork  Beef  Mince  Mutton  Sansagcs	2·08 3·91 1·17 2·75 ·83 2·87 ·75 2·0 ·66	1250·0 1336·23 6248·0 1249·87 454·5 3186·04 795·37 1363·5 909·0	148.75 13.36 206.18 283.72 60.90 592.60 142.37 323.15 155.44	116·25 1135·79 249·92 327·46 109·99 634·02 247·36 252·24 212·70	312·42 - - - - - - - - - - - - -
Vegetable.—Bread Biscuits Flour Meal Barley Potatoes Cabbage Lentils Carrot Onions Turnip Sugar Jam	3:37 :58 :17 :58 :08 :95 :25 :12 :12 :04 :12 1:75 1:17	12357·85 454·5 513·58 1872·54 227·25 9494·5 340·87 1108·98 227·25 2104·33 3354·21 1590·75	1136·92 48·17 58·55 301·48 19·31 170·90 47·72 87·60 9·98 3·18 18·94 — 9·54	160·65 34·99 5·13 134·82 2·5 9·49 6·82 3·41 2·22 ·68 2·10 — 1·59	6562·02 145·89 385·70 1263·96 176·80 1395·69 163·62 201·79 82·06 20·22 119·95 3354·21 1344·18
(D. 4.1	9.30	37055:36	1912.29	364.40	15216.09
Total	26:32	53847.87	3838.76	3650.13	15593.05

#### No. XVII.

		1		WEIGHT	used.	
KIND OF FOOD MATERIAL.	C	otal -	Total Food		Nutrients.	
		Shildings.	Material in Grams.	Protein in Grams.	Pat in Grams.	Carbohydrates in Grams,
Findon haddock Haddock Dripping Beef Corn beef Mince Liver	•	·21 1·17 ·66 ·87 ·25 ·12 ·83 ·75 ·5 ·58 ·12	$\begin{array}{c} 150.0 \\ 681.75 \\ 3408.0 \\ 1363.5 \\ 909.0 \\ 113.62 \\ 1449.85 \\ 227.25 \\ 454.5 \\ 795.37 \\ 113.62 \end{array}$	17·85 6·82 112·46 219·52 76·35 — 269·67 32·49 81·35 160·66 19·43	13.95 579.48 136.32 5.45 1.82 111.01 288.52 54.08 141.35 24.65 26.59	170·40
		6.06	9666 •46	996.60	1383.22	198:35
Rolls Meal Barley Semolina Potatoes Turnip Onions		3·33 ·25 ·41 ·17 ·25 ·33 ·17 ·25 1·14	14544·0 427·23 1590·75 454·5 340·87 3181·5 2217·96 1363·5 2272·5	1338·05 45·28 256·11 38·63 40·56 57·27 19·96 19·09	189·07 32·90 114·53 5·0 2·04 3·18 2·22 4·09	7722:86 137:14 1073:75 353:60 258:38 467:68 126:42 121:35 2272:5
W-2-0	-	6.30	26392:81	1814.95	353.03	12533.68
Total		12:36	36059.27	2811.55	1736.25	12732:0
	1	Vo.	XVIII.			
Animal.—Eggs Butter Cheese Milk Buttermilk Cod Ham Dripping Beef Sausages Mutton Mince		2·21 ·52 ·25 ·66 ·21 ·25 ·33 ·08 ·91 2·25 ·17 ·62	1300· 231·79 199·98 4544·0 1704·0 427·23 227·25 86·35 768·10 2045·25 113·62 568·12	154·7 2·32 55·39 149·95 51·12 71·35 51·58 ————————————————————————————————————	73·59 181·76 8·52 1·28 59·54 84·36 152·85 478·59 21·02 176·68	8·2 227·2 81·7 ————————————————————————————————————
		8·46 2·29		1042.84	147:30	6019:0
Vegetable.—Bread Scone Flour Rice Potatoes Onions Sugar Jam		·25 ·56 ·17 ·5 ·23 ·1·06 ·41	513·58 2386·12 454·5 6653·88 1195·33 2117·97 1077·16	54·4· 272·00 36·30 119·7· 16·7· 6·4	$egin{array}{c cccc} 4 & & 39.5- \ 23.86 & & 1.36 \ 7 & & 6.6 \ 3 & & 3.56 \ \hline & & & & 1.0 \ \end{array}$	1791:3 359:6 978: 106:3 2117: 910:
Currants Raisins		17	1 30- 05		3 6.8	2 155.
		5.81	26188-27	1559.3		
Total		14.2	38403.96	2716.9	3 1790.2	2 13234

#### No. XIX.

		1	WEIGH	r used.	
KIND OF FOOD MATERIAL.	Total Cost in Shil-	Total Food		Nutrient	.s.
	lings.	lings. Material in Grams.		Fat in Grams.	Carbohydrates in Grams.
Animal.—Butter Milk (skim) Milk (condensed) Buttermilk Beef Sausages Mutton Rabbit	5 5 5 1.25 1.25 1.0 5.07	454·5 2272·0 681·75 3408·0 881·73 568·12 340·87 1704·37	4·54 77·25 78·40 102·24 164·0 97·15 80·78 364·73	6·82 2·73 17·04 175·46 132·94 63·06 165·32	115·87 297·92 163·58 - 40·33 - -
Vegetable.—Bread Flour Meal Potatoes Onions Carrots Cabbage Haricot beans Sugar Jam	3·41 ·04 1·5 1·58 ·21 ·08 ·08 ·12 1·19 ·54	13898·61 313·60 4804·06 19825·29 1195·33 913·54 1081·71 227·25 2358·85 909·0	969·09 1278·67 36·75 773·45 356·85 16·73 8·22 15·14 51·13 — 5·45 2542·39	180.68 3.14 345.89 19.82 3.58 1.83 2.16 4.09 - .91	7380·16 235·51 3242·74 2914·32 106·38 67·60 51·92 135·44 2358·85 768·10
Total	13.82	55838.58	3511.48	1511.79	17878:72
	No.	XX.		<u> </u>	
Animal.—Eggs  Butter Cheese Milk (condensed) Milk Haddock Findon haddock Herring Dripping Salmi Beef Mutton Sausages	1·27 1·08 ·66 ·41 ·41 ·25 ·25 ·25 ·54 ·17 ·83 1·17 1·25 ·75	650·0 681·75 313·60 509·04 2272·0 454·5 454·5 1449·85 172·71 340·87 1081·71 909·0 681·75	77:35 6:82 86:87 58:54 74:97 38:18 73:17 343:61 -74:31 201:20 215:43 116:58	60·45 579·49 115·40 2·04 90·88 ·91 1·82 49·29 168·74 123·39 215·26 168·16 159·53 1735·36	12·86 222·45 113·60 — — — — 48·40 — 397·31
Vegetable.—Bread Scone Rice Macaroni Potatoes Onions Turnips Tomatoes Sugar Jam Oil	2·58 ·58 ·08 1·12 ·33 ·12 ·08 ·5 1·5 ·58 ·08	9403·60 1313·50 227·25 2045·25 2813·35 172·71 1308·96 454·5 3181·5 909·0 59·08	865·13 139·23 18·18 274·06 50·64 2·42 11·78 4·09 — 5·45 —	122·25 101·14 ·68 18·41 2·81 ·52 1·31 1·82 - ·91 59·08	4993:31 421:63 179:53 1515:53 413:56 15:37 74:61 17:72 3181:5 768:10
Total	16.59		2738:01	$\frac{308.93}{2044.29}$	
***		0100000	2100 01	2044.59	11978 17

## No. XXI.

		-				
				WEIGHT (	USED.	
KIND OF FOOD MATERIAL.		Total Cost	Westerl Tree-I		Nutrients	
KIND OF FOOD MAIERIAD.		n Shillings.	Total Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams,
Butter Cheese		1·25 2·75 1·33	850·0 1054·44 881·73	101·15 10·54 244·24	79·05 896·27 324·47	
Herring Haddock		1.75 .46 .21	7952·0 740·83 454·5	262·41 175·57 38·18	318.08 25.19 .91 178.62	 
$\begin{array}{c} \text{Dripping} \\ \text{Beef} \end{array} \dots$	• • •	.54 .04 1.79	681.75 113.62 1790.73	154·76 — 333·07 47·39	111·01 356·35 36·99	
0		1:33	199.98	233.16	$\frac{319.06}{2646.0}$	96·81 
		11.74	16083.08			
VEGETABLE.—Bread Scone Meal		4·06 ·41 ·17	14630:35 854:46 454:50	1345·99 90·57 73·17	190·19 65·79 32·72	7768:71 274:28 306:79
$egin{array}{ll}  ext{Barley} & \dots \  ext{Potatoes} \  ext{Cabbage} & \dots \end{array}$		1.0 1.0 -29	454.50 9549.04 4208.67	38.63 171.88 58.92	5.0 9.55 8.42	353·60 1403·71 202·02
Onions Turnip Peas		$\begin{array}{c c} .08 \\ .12 \\ .08 \end{array}$	427·23 1931·62 227·25	5·98 17·38 55·90	$1.28 \ 1.93 \ 2.27$	38·02 11 <b>0</b> ·10 140·89
Sugar Jam		1.64	1304·41 909·0	5.45	.91	1304· <b>4</b> 1 768·10
		8.02	34951:03	1863.87	318.06	12670.63
Total		19.76	51034.11	3464.34	2964.06	13201.19
		No.	XXII.		1	1
Animal.—Eggs Butter Cheese	•••	2·21 2·08 ·66	1200·0 736·29 454·5	142.80 7.36 125.89	111.60 625.84 167.25	18.63 397.60
Milk Flounders Findon haddoo	 ck	$     \begin{array}{c c}       1.75 \\       2.08 \\       \cdot 79   \end{array} $	7952·0 4 <b>0</b> 90·5 909·0	262·42 261·79 146·35	318 03 12 27 3 64 2 27	
Haddock Anchovies Herring	•••	.66 .45 .25	1136·25 59·08 513·58	95·44 17·84 121·72	10·99 17·46	_
Chicken Beef		2·5 5·37 1·04	1763·46 3840·52 1222·60	241·59 714·34 189·50	216·90 764·26 96·58	
Veal	•••	19.84	23877.78	2327.04	2347 · 14	416.2
VEGETABLE.—Bread Scones Rolled oats	•••	2·79 1·95 ·08	13635·0 3240·58 140·89	1254·42 343·50 23·53	177 ·25 249 ·52 10 ·28	1040 22
Quaker oats Barley Flour		·21 ·12 ·25	881:73 340:87 736:29	129.61 28.97 83.94	7:36	265·2 552·9
Potatoes Turnip Cabbage	•••	.58 .08 .08	5653:98 1022:62 1081:71	101.77 9.20 15.14	1:02 2:16	58.2
Beetroot Tomatoes Sugar		·08 ·25 ·66	427·23 227·25 1281·69	5·55 2·04	1	8·8 1281·6
Oil	• • •	.41	168.16			
		7.54	28838.0	1997:67	+681.16	)

#### No. XXIII.

				WEIGHT	USED.			
Kind of Food Material.		Total Cost	Total Food		Nutrients.			
KIND OF POOD BIAIRMAN.		in Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.		
Cheese Milk Beef		1:33 3:33 1:17 3:5 0:5	907·2 1986·77 5103·0 3061·8 567·0	9·07 550·33 168·40 569·49 134·38	771·12 731·13 204·12 609·30 104·89	81·46 255·15 —		
	1	9.83	11625:77	1431.67	2420:56	336.61		
Meal Potatoes Lentils		4·37 ·5 1·91 ·17 ·08 ·21 1·25 ·83	19051·20 1587·6 23814·0 453·6 226·8 3578·90 2721·6 1360·8	1752·71 255·60 428·65 116·57 55·79 32·21 — 8·16 2649·69	247:66 114:31 23:81 4:54 2:27 7:16 — 1:36	10116·19 1071·63 3500·66 268·53 140·62 264·84 2721·6 1149·88		
Total		19:15	64420.27	4081:36	2821.67	19570:56		
	]	No.	XXIV.					
. Animal.—Butter Milk Beef Mince		1·0 1·33 ·25 ·87	822·64 6248·0 795·37 795·37	8·22 206·18 147·94 142·37	699·24 249·92 158·28 247·36	312·40 —		
		3.45	8661.38	504.71	1354.80	312:40		
Vegetable.—Bread Meal Barley Potatoes Turnip Onions Cabbage Sugar Jam		3·27 ·5 ·08 ·75 ·21 ·12 ·04 1·35 1·12 7·44	1931.62	1210·10 146·35 19·31 175·89 23·27 8·78 9·54 ————————————————————————————————————	170·99 65·45 2·50 9·77 2·59 1·88 1·36 — 1·93	6984·36 613·57 176·80 1436·45 147·41 55·82 32·72 2186·14 1632·22		
Total	•••	10.89	40735:43	2109.54	1611 27	13577.89		

#### No. XXV.

			WEIGHT	used.	
KIND OF FOOD MATERIAL.	Total Cost	Total Food		Nutrients	
	in Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Animal.—Eggs  Butter Cheese Milk Condensed milk Ham Beef Mutton Mince Sausages	21 ·68 ·19 ·75 ·46 1·04 ·5 1·25 ·37 2·0 7·45	150· 666·79 113·4 3402·0 426·38 539·78 453·6 1896·05 367·42 1841·62	17.85 6.67 31.41 112.27 49.03 122.53 84.37 449.36 65.77 314.92	13:95 566:77 41:73 136:08 1:70 141:42 90:26 350:77 114:27 430:94	- 4·65 170·10 186·33 - - - 130·75 - 491·83
VEGETABLE.—Bread  Meal Potatoes Turnips Onions Sugar	2·0 ·21 ·5 ·12 ·08 ·97 3·88	8083·15 793·8 6468·34 2100·17 539·78 2326·97	743·65 127·80 116·43 18·90 7·55 —	105:08 57:15 6:47 2:10 1:62 —	4292·15 535·81 950·84 119·71 48·04 2326·97
Total	11.33	30169.25	2268:51	2060:31	8765:35
	No.	XXVI.		1	1
Animal.—Eggs  Butter Cheese Milk Skim milk Skim milk Cod Ham Dripping Dripping Beef Mutton Sheep's heart Sausages	21 ·5 ·46 ·04 ·62 ·17 ·08 2·17 1·66 ·41	113.4 113.4 2209.03 1134.0 453.6 226.8	11·9 8·66 31·41 74·84 105·95 8·43 132·56 25·74 — 410·88 268·76 76·66 38·78 — 1194·57	9·3 736·41 41·73 90·72 9·35 1·41 2·38 29·71 110·79 439·60 209·79 57·15 53·07	
VEGETABLE.—Bread  Flour Meal Potatoes Turnip Onions Haricot beans Peas Sugar	2·83 ·25 ·17 ·1·21 ·21 ·12 ·10 ·09	10328·47 793·8 453·6 12056·69 907·2 340·2 226·8 226·8 2100·17	950·22 90·49 73·03 217·02 8·16 4·76 51·03 55·79 —	134·27 7·94 32·66 12·05 ·91 1·02 4·08 2·27 —	5484·42 596·14 306·18 1772·33 51·71 30·28 135·17 140·62 2100·17
Total	. 14.20	39222:99	2645.07	1986.61	10923:60

# No. XXVII.

	1		WEIGHT	USED.	
	Total			Nutrients	3.
KIND OF FOOD MATERIAL.	Cost in Shil- lings.	Total Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams,
Animal.—Eggs  Butter Cheese Milk Condensed milk Buttermilk Baeon Haddocks Beef Mutton Liver Minee Sausages Soup	·25 1·73 ·21 1·08 ·17 ·04 ·41 ·50 1·70 1·29 ·5 ·25 1·0 ·25	150·0 1528·63 113·40 5103·0 113·4 283·50 226·8 680·4 1564·92 1446·98 680·4 172·37 907·2 2268·0	17:85 15:28 31:41 168:40 13:04 8:50 51:48 57:15 291:07 342:93 137:44 30:85 155:13 24:95	13·95 1299·33 41·73 204·12 ·45 1·42 59·42 1·36 311·42 267·69 21·09 53·61 212·28 2·27	 4·65 255·15 49·55 13·61   17·01  64·41 176·90
	9.38	15239.0	1345:48	2490.14	581.28
VEGETABLE.—Bread Seone, &c. Flour Meal Barley Potatoes Onions Cabbage Turnip Peas Oranges Sugar	2·23 1·0 ·25 ·25 ·08 1·04 ·37 ·25 ·12 ·08 ·17 1·19	9394·05 2780·57 793·8 907·2 226·8 10242·29 2013·98 2522·02 1728·22 226·8 512·57 2807·78	\$64.25 294.74 90.49 146.06 19.28 184.36 28.19 35.31 15.55 55.79 3.07	122·12 214·10 7·94 65·32 2·49 10·24 6·04 5·04 1·73 2·27 0·51	4988·24 892·57 596·14 612·36 176·45 1505·62 179·24 121·06 98·51 140·62 43·57 2807·78
	7.03	34156.08	1737.09	437.80	12162:16
Total	16.41	49395.08	3082.57	2927 · 94	12743 · 44
	Jo. X	XVIII.	1	<u> </u>	
Animal.—Butter Checse 'Milk (skim) Milk (sweet) Buttermilk Fish (ling) Bacon Beef bones Mutton Sausages	*83 ·39 ·58 ·54 ·04 ·25 ·66 ·87 ·25 ·62	662:26 226:8 3969:0 2835:0 283:5 480:82 966:17 1306:37 340:2 739:37	6:62 62:82 134:95 93:55 8:5 91:35 219:32 242:98 80:63 126:43	562·92 83·46 11·91 113·40 1·42 1·92 253·14 259·97 62·94 173·01	9·30 202·42 141·75 13·61 — — — — 52·49
	5.03	11809 • 49	1067:15	1524.09	419.57
Vegetable.—Bread          Rolls          Flour          Meal          Rice          Macaroni          Potatocs          Turnip          Onions          Sugar	2·21 ·17 ·21 ·21 ·33 ·12 ·62 ·29 ·04 ·79	9743·33 453·6 766·58 793·8 907·2 226·8 7770·17 3846·53 140·62 1859·76	896·38 48·08 87·39 127·80 72·57 30·39 139·86 34·62 1·97	126·66 34·93 7·66 57·15 2·72 2·04 7·77 3·85 ·42	5173·71 145·60 575·70 535·81 716·69 168·06 1142·21 219·25 12·51 1859·76
	4.99	26508:39	1439.06	243.20	10549:30
Total	10.02	38317.88	2506.21	1767.29	10968.87

#### No. XXIX.

			WEIGHT	USED.	
KIND OF FOOD MATERIAL.	Total Cost	Watal Band		Nutrient	··
	in Shil- lings.	Total Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Animal.—Eggs  Margarine Cheese Milk (skim) Haddocks Ham Beef and bones Mutton Minee Sausages	1.17 .56 1.21 .79 .33 1.37 .58 .87 1.41 8.93	500° 793°8 367°42 7938°0 2381°4 226°8 2435°83 453°6 907°2 2013°98	59·5 7·94 101·77 269·89 200·04 51·48 453·06 107·50 162·39 344·39	46·5 674·73 135·21 23·81 4·76 59·42 484·73 83·92 282·14 471·27	15·06 404·84 — — — — — — — — — — — — 562·89
VEGETABLE.—Bread Rolls Meal Rice Barley Potatoes Lentils Onions Carrots, &c Haricot beans Sugar	3·95 ·33 1·0 ·12 ·17 ·58 ·25 ·17 ·41 ·08 1·52	17499·89 1251·94 2721·6 453·6 453·6 7910·78 907·2 743·90 4504·25 140·62 3547·15	1609·99 132·70 438·18 36·29 38·55 142·39 233·15 10·41 40·54 31·63	227·50 96·40 195·95 1·36 4·99 7·91 9·07 2·23 9·01 2·53	9292·44 401·87 1837·08 358·34 352·90 1162·88 537·06 66·21 333·31 83·81 3547·15
Total	8:58	40134·53 58152·56	2713.83	556·95 2823·44	17973·05 18535·94
	No.	XXX.			
Animal.—Eggs  Margarine Milk (skim) Milk (sweet) Ham Dripping Beef and bones Mutton Sausages Mince Liver	.75 .79 1.12 .25 .62 .12 1.37 .54 .87 .5	450 · 684 · 94 7938 · 0 1134 · 0 349 · 27 340 · 2 3007 · 37 508 · 03 821 · 02 480 · 82 226 · 8	53·55 6·85 269·89 37·42 79·28 — 559·37 120·40 140·39 86·07 45·81	41.85 582.20 23.81 45.36 91.51 332.37 598.47 93.98 192.12 149.53 7.03	
VEGETABLE.—Bread Scones, &c Flour Meal Barley Potatoes Cabbage Turnip Onions Lentils Sugar Treacle Currants Raisins Tomatoes	7·10  4·97 1·5 ·25 ·58 ·25 ·58 ·21 ·25 ·12 ·21 1·37 ·17 ·17 ·17 ·17 ·17 ·17 ·17 ·17	15940·45  19786·03 4944·24 793·8 2041·2 625·97 7148·74 1905·12 2871·29 226·8 453·6 3343·03 453·6 226·8 113·4 113·4 45047·02	1399·03 1820·31 524·09 90·49 328·63 53·21 128·68 26·67 25·84 3·17 116·57 10·88 5·44 2·60 1·02 3137·60	2158·23 257·22 380·71 7·94 146·97 6·88 7·15 3·81 2·87 ·68 4·54 — 3·85 3·40 ·45 826·47	525·50 10506·38 1587·10 596·14 1377·81 487·00 1050·86 91·44 163·66 20·18 268·53 3343·03 314·34 168·28 77·68 4·42 20056·85
Total	18.02	60987:47	4536.63	2984.70	20582:35

#### No. XXXI.

	140.				
			WEIGHT	USED.	
Kind of Food Material.	Total Cost	Total Food		Nutrient	3.
KIND OF POOD MAISURES.	in Shil lings.	Material in Grams.	Protein	Fat	Carbohydrates in Grams.
			in Grams.	in Grams.	in Granis.
	87	650	77.35	60.45	<u> </u>
	'54	453.60	4.54	385.56	1.12
	'08	27.22	7.54	10.02	226.80
	91	4536·0 1646·57	149·69 274·98	181·44 4·94	220 30
77 11 -1	·66 ·46	739:37	62.11	1.48	
TT	1.17	821.02	186.37	215.11	_
TO 1	$ \hat{\cdot}\hat{2} $	172.37	23.10	41.71	—
Beef and bones.		2667.17	496.09	530.77	
α	87	852.77	145.82	199.55	60.55
Mince	.29	226.80	40.60	70.53	
	7.64	12792.89	1468.19	1701.56	288.47
	2.83	12247 · 2	1126.74	159:21	6503.26
	41	793.8	84.14	61.12	254.81
	'54	1247.4	200.83	89.81	841.99
	17	453.6	36·29 14·65	$1.36 \\ 1.90$	358·34 134·10
Datataan	·08   ·58	172·37 8790·77	158.23	8.79	1292.24
TT	58	5107.54	45.97	5.11	291.13
0	04	172.37	2.41	.52	15.34
Dana	17	653.18	160.68	6.53	404.97
Sugar	44	1047.82	_	_	1047.82
	.08	113.4	.68		95.82
$ m Apples \ \ .$	.08	567.0	1.70	1.70	61.24
	5.92	31366.45	1832:32	336.05	11301.06
Total .	13.56	44159:34	3300.21	2037:61	11589:53
	No.	XXXII.			
Animal.—Eggs		450.00	53.55	41.85	
Butter	2.17	979.78	9.80	832.81	_
Cheese	1.5	907:20	251.29	333.85	37.19
Condensed milk		680.40	78.25	2.72	297:33
YY	·41 ·83	907·20 453·60	151.50	2.72	_
Duinnin	-05	226.80	102.97	118.84	
DÎ	2.66	1814.40	337.48	361.06	
T iman	41	907.20	183.25	28.12	22.68
Mince	25	226.80	40.60	70.53	
	75	680.40	116.35	159.21	48.31
Mutton	1.17	907 · 20	215.01	167.83	_
	11:36	9140.98	1540.05	2341·12	405.51
VEGETABLE.—Bread	7.25	34360.2	3161.14	446.68	18245.27
Rolls, &c.	5	1134.0	120.2	87.32	364.01
Potatoes .	1.0	9525.6	171.46	9.52	1400.26
Oniona	12		13.51	3.0	111.10
Rooma	·08	453·6 453·6	6.35	1.36	40.37
Sugar	1.35		102.06	8.16	270·34 3288·6
Tally,	77		7:32	1.22	1031.05
	11.28	51937.2	3582:04	557.26	24751.00
Total .	22.64	61078.18	5122:09	2898:38	25156.51
		1	1		

#### No. XXXIII.

				WEIGHT	USED.	
KIND OF FOOD MATERIAL.	1	Total Cost	Total Food		Nutrients	
TIME OF FOOD		in Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Animal.—Butter Cheese	• • •	2.0	771·12 453·6	7·71 125·65	655·45 166·92	18:60
Milk Haddock	•••	75	3402·0 2268·0	$\begin{vmatrix} 112.27 \\ 190.51 \end{vmatrix}$	136.08 4.54	170.10
Ham		17	113.4	25.74	$29.71 \\ 135.40$	_
Beef Mince		1.04	680·4 567·0	126.55 $101.49$	176:34	
Rabbit		17	226·8 226·8	48.53	$22.0 \\ 41.96$	_
Mutton	• • •	6.76	8709.12	792.20	1368:40	188.70
VEGETABLE.—Bread	•••	2.79	11480:62	1056.22	149.25	6096.21
Scone		17	$254.02 \\ 226.8$	26.93 19.28	19.56 2.49	81·5· 176·4
Barley Potatoes		.91	12700.8	228.61	$\begin{vmatrix} 12.70 \\ 2.27 \end{vmatrix}$	1867:09 140:69
Peas		25	226·8 1560·38	55.79	1.56	88.9
$rac{ ext{Turnips}}{ ext{Onions}} \dots$		.04	226·8 2776·03	3.17	-68	20.18 $2776.0$
Sugar	•••	1.19	29452.25	1404.04	188.51	11246.9
${\bf Total}$		12.53	38161:37	2196.24	1556.91	11435.6
		No. X	XXIV.	1		
Animal.—Eggs		.17	100.	11.9	9.3	_
Butter		·62 ·91	281·23 3969·0	130.98	158.76	198.4
$egin{array}{cccc} \mathbf{Milk} & \cdots & \\ \mathbf{Cod} & \cdots & \end{array}$		41	680.4	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2·04 89·13	
Ham Dripping		.25	340·2 226·8	_	221.58	
Pork	•••	·37	226.8	30·39 126·55		_
Beef		-75	$\begin{array}{c} 680 \cdot 4 \\ 680 \cdot 4 \end{array}$	121.79	211.60	
Mince Sausage	•••	1.5	1360.8	232.70	318.43	96.6
		6:47	8546.03	847 · 97	1440.16	295.0
VEGETABLE.—Bread		. 2.77	10972.58	1009:48		5826·4
Meal		17	226·8 8337·17	36·51 150·07	8.34	1225
Potatoes Turnips		·21	1759.97	15.84	1.76	
Lentils		. 08	226·8 226·8	58·29 51·03		135
Haricot bea	ns	73	1587.6	-		1587 (
Sugar Jelly	••	58	$\frac{907.2}{24244.92}$	$-\frac{5.44}{1326.66}$		-
		5.49	24244 32	2020 00		
Total	••	11.96	32790.95	2174.6	3 1616.49	10224

#### No. XXXV.

			WEIOHT	USED.		
Want of Real Manager	Total Cost	m 4 2 7 1	Nutrients.			
KIND OF FOOD MATERIAL.	in Shil- lings.	Total Food Material In Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.	
Animal.—Eggs  Butter Cheese Milk Buttermilk Haddock Bacon Beef Mutton Sausages	1·54 3·21 ·39 1·83 ·04 ·95 ·5 2·79 ·58 ·33	\$00.0 1274.62 226.8 7938.0 283.5 1079.57 226.8 1982.23 453.6 254.02	95·20 12·75 62·82 261·95 8·50 90·68 51·48 368·69 107·50 43·44	74·40 1083·43 83·46 317·52 1·42 2·16 59·42 394·46 83·92 59·44 2159·63	9·30 396·90 13·61 — — — — — — — — — — — — — — — — — — —	
Vegetable.—Bread Scones, &c Flour Meal Barley Potatoes Cabbage Onions Lentils Haricot beans Sugar	2·83 ·83 ·37 ·58 ·12 ·66 ·33 ·12 ·12 ·14 1·25	10464·55 2807·78 1161·22 1841·62 254·02 6608·95 3002·83 512·57 226·8 2943·86	962·74 297·62 132·38 296·50 21·59 118·96 42·04 7·17 58·29 51·03	136·04 216·20 11·61 132·60 2·79 6·61 6·00 1·54 2·27 4·08	5556·68 901·30 872·08 1243·09 197·63 971·51 144·13 45·62 134·26 135·17 2943·86	
Total	$\frac{7 \cdot 35}{19 \cdot 51}$	30051.00	3091.33	$\frac{519.74}{2679.37}$	$\frac{13145.33}{13583.17}$	
	No. X	XXVI.	1.			
Animal.—Butter Cheese Milk Buttermilk Cod Beef Veal Mutton Mince Sausages	1.75 .56 1.5 .08 1.0 1.83 .17 .5 .5 1.37 -9.26	1587·6 340·2 6804·0 567·0 2154·6 2181·82 113·4 340·2 480·82 1501·42	15·88 94·23 224·53 17·01 359·82 405·82 17·58 80·63 86·07 256·74	1349·46 125·19 272·16 2·83 6·46 434·18 8·96 62·94 149·53 351·33		
VEGETABLE.—Bread Scones, &c Flour Barley Meal Potatoes Turnips Onions Sugar	3·29 1·17 ·08 ·17 ·46 ·77 ·21 ·17 1·5	14143·25 2921·18 226·8 453·6 1528·63 9924·77 2612·74 707·62 3941·78	1301·18 309·64 25·85 38·56 246·11 178·64 23·51 9·91 —	183·86 224·93 2·27 4·99 110·06 9·92 2·61 2·12 — 540·76	7510·06 937·70 170·33 352·90 1031·82 1458·94 148·93 62·98 3941·78	
Total	17.08	52531.43	3691.71	3303.80	16103:41	

#### No. XXXVII.

			WEIGHT U	JSED.	
KIND OF FOOD MATERIAL.	Total Cost	Motel 70		Nutrients	
KIND OF POOD MATERIAL.	in Shil- lings.	Total Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Animal.—Eggs  Butter  Milk  Findon haddock  Bacon  Dripping  Beef  Mutton  Sausages  Mince  Black pudding	·41 1·33 ·58 ·91 1·04 ·21 ·54 ·5 ·29 ·25 ·17	300·0 680·4 2268·0 1360·8 680·4 172·37 340·2 453·6 226·8 226·8 226·8	$\begin{array}{c} 35.7 \\ 6.80 \\ 74.84 \\ 219.09 \\ 154.45 \\ \hline -63.28 \\ 107.50 \\ 38.78 \\ 40.60 \\ 7.26 \\ \end{array}$	$\begin{array}{c} 27.9 \\ 578.34 \\ 90.72 \\ 5.44 \\ 178.26 \\ 168.40 \\ 67.70 \\ 83.92 \\ 53.07 \\ 70.53 \\ 36.74 \end{array}$	
	6.23	6936.17	748:30	1361.02	138.80
VEGETABLE.—Bread Scones Flour Barley Potatoes Peas Turnips Sugar	·89 ·5 ·08 ·08 ·37 ·08 ·23 ·58	3855·6 1020·6 281·23 113·4 5216·4 226·8 2299·75 821·02	354·71 108·18 32·06 9·64 93·89 55·79 20·70	50·12 78·59 2·81 1·25 5·22 2·27 2·30	2047·32 327·61 211·20 88·22 766·81 140·62 131·08 821·02
	2.81	13834.80	674.97	142.56	4533.88
Total	9.04	20770.97	1423.27	1503.58	4672.68
N	o. X	XXVIII.	•		
Animal.—Eggs  Butter Cheese Milk Cod Haddock Findon haddock Bacon Dripping Beei Mutton Sheep's liver, &c. Mince Sausages	*41 ·79 ·35 1·08 ·25 ·25 ·17 ·93 ·5 ·66 ·33 ·41 ·37 ·5	226·8 907·2 340·2 453·6	29·75 2·81 62·82 149·69 75·75 28·58 36·51 115·32 — 84·37 53·75 183·25 60·89 77·56	_	9·30 226·8 — — — — — — — — — — — — — — — — — — —
	7.0	9657.66			
VEGETABLE. —Bread          Scones, &c.          Flour          Meal          Rice          Force          Potatoes          Pcas          Turnips          Onions          Prunes          Sugar          Jelly	12 37 17 08 5 5 19 75 08 08 25 25 33 55	793·8 1020·6 567·0 226·8 453·6 6350·4 340·2 226·8 934·42 453·6 739·37 226·8 1360·8 453·6	417·31 84·14 116·35 91·29 18·14 46·27 114·31 83·69 51·03 8·41 6·35 6·65 4·08 ————————————————————————————————————	61·12 10·21 40·82 68 9·52 6·35 3·40 4·08 93 1·36 74	254·81 766·47 382·72 179·17 308·90 933·51 210·92 135·17 53·26 40·37 19·22 141·07 1360·8 383·29
1					7869.28
Total	12.31	28341.45	2011 /	1011 0	

#### No. XXXIX.

		10. A	AAIA			
				WEIGHT	USED.	
KIND OF FOOD	MATERIAL.	Total Cost	Total Food		Nutrients	
VIVO 64 LOOD	MATERIAU.	in Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams,
Ch Mi Mi Co Ha Ba Dr Be	tter eese lk (sweet) lk (skim) ndensed milk ddock con ipping	91 2·39 ·19 ·91 ·75 ·25 ·29 2·70 ·04 ·83 ·75	600·0 1301·83 113·4 4536·0 5103·0 285·77 480·82 1873·37 27·22 1075·03 707·62	71·40 13·02 31·41 149·69 173·50 32·86 40·39 425·25 ——————————————————————————————————	55 ·80 1106 ·55 41 ·73 181 ·44 15 ·31 1 ·14 ·96 490 ·82 26 ·59 213 ·93 220 ·07 2354 ·34	
Me Po Tu Ca	ead lls eal tatoes urnips urrots gar	5·21 ·83 ·52 1·12 ·37 ·08 1·66	24099·77 2984·69 1673·78 117·66·38 3374·78 1274·62 3656·02	2217·18 316·38 269·48 211·79 30·37 11·47	313·30 229·82 120·51 11·77 3·37 2·55	12796 98 958 08 1129 80 1729 66 192 36 94 32 3656 02
		9.79	48830:04	3056.67	681.32	20557 · 22
	Total	19.80	64934·10	4320.80	3035.66	21173 80
		No	XL.			
Ch Mi Bu Ha Ba Dr Po Be M	ggs neese nilk nttermilk addock ncon ripping ork utton usages	·25 ·73 ·19 2·12 ·04 ·58 ·21 ·08 ·66 ·87 ·66 2·17 ·5	150·0 299·38 113·4 9639·0 283·5 739·37 113·4 113·4 453·6 539·78 934·42 2735·21 426·38	$\begin{array}{c c} 17.85 \\ 2.99 \\ 31.41 \\ 318.09 \\ 8.50 \\ 62.11 \\ 25.74 \\ \\ 60.78 \\ 100.40 \\ 221.46 \\ 467.72 \\ 76.32 \\ \end{array}$	13·95 254·47 41·73 385·56 1·42 1·48 29·71 110·79 109·77 107·40 172·87 640·04 132·60	4·65 481·95 13·61 — — — — — — — — — — — — ————————————
		9.06	16540.84	1393:37	2001.79	694:41
M Se Pr On Tr Sn Ja	read cones eal emolina otatoes nions urnips agar am	·81 ·17	13249·66 1701·0 1360·8 226·8 6690·6 653·18 793·8 2467·58 1134·0 254·02	1218 97 180 31 219 09 26 99 120 43 9 14 7 14 — 6 80 2 03	6·69 1·96 ·79 — 1·13 1·02	918·54 171·91 983·52 58·13 45·25 2467·58 958·23 36·32
		7.71	28531.44	1790.90		
	Total	16.77	45072.28	3184.27	2415.94	13915.48

#### No. XLI.

				WEIGHT	nakd.	
KIND OF FOOD MATE	RIAL.	Total Cost in Shil-	Total Food		Nutrient	g.
		lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
ANIMAL,—Eggs		.83	550	65.45	51.15	_
Butter Cheese	•••	1.5	966:17	9.66	821.24	-0.00
Milk	•••	.08	$226.8 \\ 283.5$	$62.83 \\ 9.35$	83·46 11·34	9·30 14·17
Butterm		1 .17	1134.0	34.02	5.67	54.43
Condens	ed milk	-29	567.0	65.20	2.27	247.78
Cod Bacon	•••	1.25	2268.0	378.75	6.80	
Pork rib	 os	2·25	$340.2 \\ 4055.18$	77·22 543·39	89·13 981·35	
Beef		.5	1388.02	258.17	$\frac{331}{276 \cdot 21}$	
Mutton		41	453.6	107.50	83.92	_
Sausager		1.33	1932:34	330.43	452.17	137.20
Rabbit	•••	1.0	1841.62	394·11	178.64	
		10.44	16006.43	2336.08	3043:35	462.88
VEGETABLE.—Bread		3.91	14542:42	1337.90	189.05	7722:02
Scone	•••	$ \cdot_{12} $	335.66	35.58	25.84	107.75
Flour		91	3175.2	361.97	31.75	2384.57
Potatoes		1.06	13608:0	244.94	13.61	2000:37
Turnips Onions		•58 •25	$6640.70 \\ 1020.6$	59.76	6.64 3.06	378·52 90·83
Haricot	beans	08	172.37	38.78	3.10	102.73
Peas		•58	1020.6	251.07	10.21	632.77
Sugar	•••	•62	1415:23		_	1415.23
		8.11	41930.78	2344.29	283.26	14854.79
Total	al	18.55	57937.21	4680:37	3326.61	15317:67
		No.	XLII.			
Animal.—Butter	•••	1.08	734.83	7.35	624.60	
Milk		1.41	6237:0	205.82	249.48	311.85
Cod		.41	539.78	90.14	$\begin{bmatrix} 1.62 \\ 214.83 \end{bmatrix}$	
Beef Mutton	•••	1.33	$1079.57 \\ 226.8$	200.80	41.96	_
Rabbit		.66	993:38	212.58	96.36	_
Mince	•••	•5	453.6	81.19	141.07	
Sausages	s	.5	512.56	87.64	119.93	36.39
		6.22	10777:52	939 • 27	1489.85	348.24
VEGETABLE,—Bread		1.5	6577:20	605.10	85.50	3492.49
Scones, &		.33	961.63	101.93	74.04	308.68
Meal		33	934.42	150.44	$67.28 \ 1.25$	$\begin{bmatrix} 630.73 \\ 88.22 \end{bmatrix}$
Barley Potatoes		·04 ·35	$113.4 \\ 4563.22$	$oxed{9.64}{82.14}$	4.56	670.79
0 1		-02	140.62	1.97	•42	12.51
Turnips		.17	1759:97	15.84	1.76	100.32
	•••	·68	$\frac{113.4}{1642.03}$	27.90	1.13	70.31 $1642.03$
Sugar	•••			004.00	905:04	
		3.48	16805.89	994 96	235.94	7016:08
Tota	ıl	9:70	27583:41	1934 · 23	1725.79	7364:32

## No. XLIII.

		110.	JALLAIA.			
				WEIGHT	USED.	
Many on Many Manyoris		Total Cost			Nutrient	S.
KIND OF FOOD MATERIAL.		in Shillings.	Total Food Material		1	1
		III 55.	in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
A		1 .40	050.0	00.75	02.05	
Animal.—Eggs Butter		1.73	250·0 625·97	29.75	23.25 $532.07$	
Milk (sweet)		1.75	7938.0	261.95	317.52	396.90
Milk (skim)		83	5670.0	192.78	17.01	289.17
Cod	•••	•46	966:17	161.35	2.90	
Haddock	•••	.68	911.74	76.59	1.82	
Bacon Beef	•••	2.21	1701·0 1560·38	386.13	445.66 310.51	
Mutton	•••	91	621.43	147.28	114.96	
Corn beef		1 .17	86.18	12:32	20.21	
Mince		.5	340.2	60.89	105.80	
Sausages		5	453.6	77.56	106.14	32.20
Rabbit	•••	.5	966·17	206.76	93.72	
		12.07	22090.84	1909.85	2091.87	718:27
VEGETABLE.—Bread		2.62	10541 .66	969.83	137.04	5597.62
Scones	• • •	1.10	2639.95	279.83	203.28	847.42
Flour Meal	•••	·17 ·58	426.38	48.61	4.26	320.21
Rice	•••	.04	1587·6 58·97	$\begin{bmatrix} 255.60 \\ 4.72 \end{bmatrix}$	114:31	1071·63 46·59
Corn flour		25	86.18	6.12	1.12	67.56
Potatoes	•••	•37	5134.75	92.42	5.13	754.81
Peas	• • •	'62	567.0	139.48	5.67	351.54
Lentils Haricots	•••	12	254.02	65.28	2.54	150.38
Cabbage	•••	21	$312.98 \ 2444.90$	70.42 $34.23$	5·63 4·89	186·54 117·35
Carrots		12	879.98	7.92	1.76	65.12
Sugar		1.35	2780.57			2780.57
Jam	•••	•52	848.23	5.09	.85	716.75
		8.24	28563·17	1979.55	486.66	13074.09
Total	•••	20:31	50654.01	3889.40	2578.53	13792:36
		No.	XLIV.			
Animal.—Eggs		2.95	1550	184.45	144.15	
Butter		4.91	2041.2	20.41	1735.02	
Cheese	• • •	.17	113.4	31.41	41.73	4.65
Milk Buttermilk	•••	1.5 .25	8505·0 3402·0	280.66	340.20	425.25
Salt herring	•••	.37	907.2	102.06   215.01	17:01 30:84	163:30
Bacon		2.04	1020.6	$\begin{bmatrix} 213 & 01 \\ 231.68 \end{bmatrix}$	267.40	
Pork		.75	1020.6	136.76	246.98	
Beef		1.37	1247.4	232.02	248.23	
Mutton Sausages	•••	2·29   ·87	$\begin{array}{c} 1927.8 \\ 793.8 \end{array}$	456.89	356.64	
Dausages	•••		195.8	135.74	185.75	56.36
F7		17.47	22529.0	2027:09	3613.95	649.56
VEGETABLE.—Bread	• • •	7.5	27216.0	2503.87	353.81	14451.70
Scones, &c. Meal	•••	1.87	$\begin{array}{c} 3742 \cdot 2 \\ 3175 \cdot 2 \end{array}$	396.67	288.15	1201.25
Meal Flour		1.0	3175°2 3175°2	511.21   361.97	228.61	2143.26
Barley		.25	453.6	38.56	$\begin{array}{c c} 31.75 \\ 4.99 \end{array}$	$2384.57 \ 352.90$
Potatoes		•75	6350.4	114.31	6.35	933.51
$egin{array}{cccc} \operatorname{Peas} & \dots & & & & & & & & & & & & & & \\ \operatorname{Lentils} & \dots & & & & & & & & & & & & & & & & & $	•••	•25	453.6	111:58	4.54	281.23
Onions	•••	$\begin{array}{c c} \cdot 17 \\ \cdot 25 \end{array}$	453·6 907·2	116.57	4.54	268.53
Cabbage	•••	.04	$\frac{9072}{285.77}$	12·70 4·00	2.72	80.74
Sugar		1.5	3628.8	_ 00		$\begin{array}{c c} 13.72 \\ 3628.8 \end{array}$
Jam	•••	•70	907.2	5.44	-91	766.58
		15.11	50748 • 77	4176.88	926.94	26506:81
Total		32.58	73277.77	6203:97	4540.89	27156:37

#### No. XLV.

					WEIGHT 1	JSED.	
KIND OF F	OOD MATERIAL.		Total Cost	Total Food		Nutrients.	
KIND OF Y			n Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams,
	Butter Cheese Milk Buttermilk Haddock Mutton Beef		1·33 3·5 ·31 ·95 ·12 1·5 1·33 1·08 ·41	600 · 1188 · 43 172 · 37 3969 · 0 1134 · 0 1587 · 6 1360 · 8 567 · 0 226 · 8	71.4 11.88 47.75 130.98 34.02 133.36 322.51 105.46 40.60	55·8 1010·16 63·43 158·76 5·67 3·17 251·75 112·83 70·53	7 07 198 45 54 43 —
	Mince	•••	10.23	10806:00	897.96	1732·10	259:95
Vegetable.—	Bread Seones, &c. Flour Meal Corn flour Cabbage Potatoes Rhubarb Oranges Apples Sugar Marmalade		·46 1·17 1·5 ·10 ·08 ·37 ·75 ·17 ·25 ·33 1·04 ·37	1360·8 1533·17 7938·0 226·8 113·4 2494·8 7938·0 453·6 680·4 907·2 2268·0 453·6	125·19 162·52 904·93 36·51 8·05 34·93 142·88 1·81 4·08 2·72 2·72	17·69 118·05 79·38 16·33 1·47 4·99 7·94 1·81 -68 2·7245	722·58 492·18 5961·44 153·09 88·90 119·78 1166·89 97·9 2268·0 383·2
			6.59	26367·77 37173·77	2324.30	251.51	11521.8
	Total	•••	17.12		1	1	1
			No.	XLVI.	1	1	1
Animal	Eggs Butter Cheese Milk Condensed m Cod Haddock Bacon Dripping Beef Mutton Black pudding		2·58 1·5 ·70 1·0 ·19 ·41 ·66 ·83 ·25 3·58 ·21 ·33	3234·17 226·8 453·6	178·5 7·94 133·19 187·11 39·12 151·50 76·20 102·97 — 601·55 53·75 14·51 — 1546·34	176:94 226:8 1:36 2:72 1:81 118:84 443:17 6:43:60 41:96 73:48	283:5 148:6 ————————————————————————————————————
			12.24		1111.30		
VEGETABLE.	—Bread Seones, &c. Meal Flour Semolina Barley Rice Potatoes Cabbage Carrot, &c. Onions		31 -21 -08 -08 -15 -17 -29	1134·0 1047·82 594·22 113·4 226·8 340·2 6350·4 2295·22 5243·62 966·17 226·8	120·20 168·70 67·74 13·49 19·20 27·20 114·3 32·11 47·11 13·5 55·7	0 87.33 75.44 5.90 68 2.44 1.00 6.33 4.53 9 10.44 3 2.99	364 · · · · · · · · · · · · · · · · · · ·
	Peas	• •		1 776-85-7-185-6			
		••	1.2	=	3.5	_	

## No. XLVII.

				WEIGHT	USED.	
KIND OF FOOD MATERIAL.		Total Cost	Total Food		Nutrients.	
KIND OF POOD MATERIAL.		n Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Butter Cheese		.5 4.39 .41 1.83 .25 .54 .91 1.46 .66 1.25 .66	250 · 1546 · 78	29·75 15·47 62·82 261·95 51·03 76·20 102·97 274·20 67·73 193·91 81·19	23·25 1314·76 83·46 317·52 8·50 1·81 118·84 293·36 52·87 265·36 141·07	9·30 396·90 81·65 — — — 80·51 —
		12.86	16370·95 	1217 · 22	2620:80	
Vegetable.—Bread Meal Peasemeal Flour Rice Corn flour Potatoes Cabbage Turnips, &c. Onions Sugar Jam		3·37 ·81 ·41 ·5 ·12 ·12 ·12 ·12 ·12 ·08 1·85 ·79	$\begin{array}{c} 11793.60 \\ 2381.4 \\ 907.2 \\ 1360.8 \\ 340.2 \\ 340.2 \\ 14288.4 \\ 707.62 \\ 512.57 \\ 453.6 \\ 4477.03 \\ 907.2 \\ \end{array}$	$ \begin{vmatrix} 1085.01 \\ 383.40 \\ 223.17 \\ 155.13 \\ 27.22 \\ 24.15 \\ 257.19 \\ 9.91 \\ 4.61 \\ 6.35 \\ -5.44 \end{vmatrix} $	153·32 171·46 9·07 13·61 1·02 4·42 14·29 1·41 ·51 1·36 — ·91	$\begin{array}{c} 6262 \cdot 40 \\ 1607 \cdot 44 \\ 562 \cdot 46 \\ 1021 \cdot 96 \\ 268 \cdot 76 \\ 266 \cdot 72 \\ 2100 \cdot 39 \\ 33 \cdot 96 \\ 29 \cdot 22 \\ 40 \cdot 37 \\ 4477 \cdot 03 \\ 766 \cdot 58 \end{array}$
		10.16	38469.82	2181.58	371.38	17437:29
Total	•••	23.02	54840:77	3398.80	2992·18	18005.65
	N	Io. X	LVIII.			l.
Animal.—Eggs Butter Milk Haddock Dripping Beef Mince		.5 .75 .83 .33 .12 1.87 .25	300° 340°2 3969°0 1360°8 113°4 1986°77 226°8	35.7 3.40 130.98 114.31 369.54 40.60 694.53	158.76 2.72 110.79 395.37 70.53	198·45 — — — — — — — — — — — —
VEGETABLE.—Bread Meal Flour Semolina Potatoes Peas Onions Haricot bean Carrots, &c. Sugar Jam	   s	3·0 ·25 ·25 ·12 ·21 ·06 ·06 ·12 ·17 ·54 ·23	508.03	1001:55 127:80 90:49 26:99 57:15 27:90 3:17 51:03 10:74 	57·15 7·94 1·36 3·17 1·13 ·68 4·08 4·238 	535·81 596·14 171·91 466·75 70·31 20·18 135·17 88·28 1415·23 429·28
		5.01	19559 23	1399 .8'	7 219.92	9709.74
Total		9.66	27856.20	2094.3	$9   1275 \cdot 16$	9908.18

#### No. XLIX.

	1		Weight	r used.		
KIND OF FOOD MATERIAL.	Total Cost in Shil-	Total Food		Nutrient	s.	
	lings.	Material in Grains.	Protein in Grams	Fat in Grams.	Carbohydrates in Grams,	
Animal.—Eggs Butter Milk Haddock Bacon Beef Mutton Mince Sausages	.5 .79 1.21 .66 .83 1.58 .5 .66 1.0	300° 367°42 5670°0 1360°8 480°82 1247°4 739°37 480°82 934°42 ————————————————————————————————————	35.7 3.67 187.11 114.31 109.15 232.02 175.25 86.07 159.78	27·9 312·31 226·8 2·72 125·97 248·23 136·78 149·53 218·65	283 50 — — — — — — — — — — — — — — — —	
	1713	11981.09	1103.06	1448.89	349.84	
VEGETABLE. — Bread          Scones, &c.          Meal          Barley          Potatoes          Peas          Onions          Carrots, &c.          Sugar	2·25 2·58 ·31 ·02 ·5 ·02 ·06 ·17 1·06	8477·78 5307·12 1079·57 54·43 6636·17 27·22 340·2 1787·18 2608·2	779·95 562·55 173·81 4·63 119·45 6·70 4·76 16·08	110·21 408·65 77·3 ·6 6·64 ·27 1·02 3·57	4501·70 1703·58 728·71 42·35 975·52 16·88 30·28 132·25 2608·2	
	6:97	26317.87	1667.93	608.69	10739:47	
Total	14.70	37898.92	2306.53	2057:56	11089:31	
	No	. L.				
Animal.—Eggs  Butter Cheese Milk Condensed milk Cod Bacon Beef Mince Corn beef	·62 4·27 1·66 2·12 ·25 1·5 3·41 4·83 ·5 ·25	$\begin{array}{c} 250 \cdot \\ 1759 \cdot 97 \\ 907 \cdot 2 \\ 9639 \cdot 0 \\ 453 \cdot 6 \\ 2721 \cdot 6 \\ 1814 \cdot 4 \\ 3175 \cdot 2 \\ 453 \cdot 6 \\ 113 \cdot 4 \end{array}$	29·75 17·60 251·29 318·09 52·16 454·51 411·87 590·59 81·19 16·22	23·25 1495·97 333·85 385·56 1·81 8·16 475·37 631·86 141·07 26·99	37·19 481·95 198·22 — — — — — —	
	19.41	21287.97	2223 · 27	3523.89	717:36	
VEGETABLE.—Bread  Meal Scones, &c Potatoes Onions Sugar Jam	5·0 ·87 ·25 2·0 ·21 1·5 ·35 10·18	18144·0 2948·4 199·58 19051·2 1360·8 3288·6 453·6	1669·25 474·69 21·15 342·92 19·05 — 2·72 2529·78	235·87 212·28 15·37 19·05 4·08 — ·45 487·10	9634·46 1990·17 64·06 2800·53 121·11 3288·6 383·29	
Total	29.59	66734 · 15	4753:05	4010.99	18999:58	

No. LI.

			Weight	USED.	
KIND OF FOOD MATERIAL.	Total Cost			Nutrients	S.
KIND OF FOOD MATERIAL	in Shillings.	Total Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
Animal.—Eggs  Butter Cheese Milk Cod Bacon Dripping Becf Potted meat	1·46 1·73 ·46 2·04 1·04 ·25 ·17 1·0 1·0	800·0 848·23 281·23 9072·0 1900·58 113·4 113·4 793·8 1560·38	95·2 8·48 77·90 299·38 317·40 25·74 — 147·65 368·25 — 1340·0	74·4 720·99 103·49 362·88 5·70 29·71 110·79 157·97 432·22 1998·15	11·53 453·60 — — — — — — — — — — — — —
Vegetable.—Bread  Meal Barley Peasemeal Potatoes Turnips Haricot beans Onions Sugar Treacle Marmalade	3·12 ·5 ·06 ·06 ·75 ·21 ·14 ·12 1·0 ·10 ·17 6·23	11340·0 1587·6 145·15 145·15 9525·6 226·8 453·6 1873·37 285·77 226·8	1043·28 255·60 12·34 35·71 171·46 20·41 51·03 6·35 — 6·86 1·36 1604·40	147·42 114·31 1·60 1·45 9·52 2·27 4·08 1·36 ————————————————————————————————————	6021·54 1071·63 112·93 89·99 1400·26 129·28 135·17 40·37 1873·37 198·04 191·65
Total	15.38	43560.86	$\frac{2944\cdot 40}{2944\cdot 40}$	2280.39	11729:36
25002			2344 40	2200 59	11/29 50
	No.	LII.	1	1	
Animal.—Butter Cheese Milk Haddock Bacon Becf Sausages Tripe Rabbit Mutton Black pudding	91 ·33 ·58 ·75 1·66 2·0 1·46 ·70 ·41 ·21 ·17	$\begin{array}{c} 625 \cdot 97 \\ 226 \cdot 8 \\ 2268 \cdot 0 \\ 1759 \cdot 97 \\ 1165 \cdot 75 \\ 1478 \cdot 74 \\ 1714 \cdot 61 \\ 1360 \cdot 8 \\ 907 \cdot 2 \\ 226 \cdot 8 \\ 340 \cdot 2 \\ \end{array}$	6:26 62:82 74:84 147:84 264:62 275:04 293:20 191:87 194:14 53:75 10:89	532·07 83·46 90·72 3·52 305·43 294·27 401·22 42·18 88·0 41·96 55·11	9·30 113·40 — — — — — — — — — — — — — — — — — — —
	9.18	12074.84	1575.27	193.94	258:39
Vegetable.—Bread Scones, &c Rice Potatoes Onions Turnips Tomatoes Sugar	2·77 1·04 ·08 ·25 ·21 ·08 ·12 ·85	9584·57 1759·97 226·8 3234·17 780·19 340·2 185·98 1841·62	881·78 186·56 18·14 58·21 10·92 3·06 1·67	124·60 135·52 ·68 3·23 2·34 ·34 ·74 —	5089·41 564·95 179·17 475·42 69·44 19·39 7·25 1841·62
	5.40	17953.5	1160:34	267:45	8246.65
Total	14.58	30028:34	2735.61	2205·39	8505.04

#### No. LIII.

	140.				
			WEIGHT U	SED.	
KIND OF FOOD MATERIAL.	Total Cost	(1)-(-1,74,1		Nutrients.	
KIND OF POOR MATERIAL.	in Shil- lings.	Total Food Material in Grams.	Protein in Grams.	Fat n Grams.	Carbohydrates in Grams.
Animal.—Butter Cheese Milk (sweet) Milk (skim) Haddock Bacon Beef Mutton Sausages Mince	.   '62 '87 '29 1 '5 .   1.75 .   1.75 .   1.17 .   1.25	907.2	$\begin{array}{c} 6.21 \\ 94.23 \\ 130.98 \\ 67.47 \\ 233.95 \\ 25.74 \\ 232.02 \\ 215.01 \\ 193.91 \\ 121.79 \\ \end{array}$	528·21 125·19 158·76 5·95 5·57 29·71 248·23 167·83 265·36 211·60	13·95 198·45 101·21 — — 80·51
	9.98	13782.63	1321:31	1746:41	394.15
Meal Barley Rice Potatoes Turnips Onions Peas	3·9 ···································	1587·6 226·8 453·6 7938·0 3973·54 140·62 726·8	1575·35 255·60 19·28 36·29 142·88 35·76 1·97 55·79	222·60 114·31 2·49 1·36 7·94 3·97 ·42 2·27	9092·5: 1071·6: 176·4: 358·3: 1166·8 226·4 12·5 140·6
	7.3	4 34391.96	2122.92	355.36	14967 · 0
Total .	17:3	3 48174.59	3444.23	2101.77	15361.1
	No	LIV.			1
Butter Cheese Milk		621·43 113·4 66 6804·0 66 480·82 11 453·6 33 1251·94 453·6 680·4	102·97 194·05 107·05 121·79	125·65 211·60	340.5
Vegetable.—Bread Scones, &c. Flour Meal Peasemeal Rice Potatoes Onions Carrots Currants Sugar Jam		95   10577·95 25   367·42 793·8 25   793·8 26·8 17   453·6 1701·0 312·98 04   226·8 140·65 5   993·38 907·2	38.95 90.49 127.80 55.79 36.29 30.62 4.38 2.04 3.37 8. — — — — — — — — — — — — — — — — — — —	28 · 28 · 29 7 · 94 57 · 16 2 · 27 1 · 30 1 · 70 94 4 · 44 7 · 2 · 31 4 · 9	117. 596. 535. 7 140. 358. 250. 27. 16. 104. 993. 766.
		$\begin{array}{c cccc}                                 $			
			4 00050 Q	1 1090	7 7000

#### No. LV.

				WEIGHT	USED.	
	N	Total Cost	Total Food		Nutrients	
Kind of Foo	D MATERIAL.	in Shil- lings.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams.
C B B S:	outter  Iilk (skim)  od  acon  eef  ausage  Iutton  Iince	1.08 1.08 62 41 .46 1.12 2.41 .25	471.74 7371.0 2326.97 226.8 399.17 1129.46 2453.98 226.8	4·72 250·61 388·60 51·48 74·24 193·14 581·59 40·60	400.98 221.13 6.98 59.42 79.43 264.29 453.99 70.53	375·92 — — — — 80·19 —
		7.03	14605 · 92	1584.98	1556.75	456.11
M P T	Gread Flour Ieal Fotatoes Curnips ugar	21	12669·05 1814·4 852·77 3315·82 2893·97 3288·6	1165·55 206·84 137·29 59·68 26·04	164·70 18·14 61·40 3·31 2·89	6727·26 1362·61 575·62 487·42 164·96 3288·6
		5.86	24834.61	1595.40	250.44	12606:47
	Total	12.89	39440.53	3180.38	1807:19	13062:58
		No.	LVI.			
C N M H H T S S N S	Eggs Butter Cheese Milk (sweet) Milk (skim) Bacon Beef Congue Shusage Mince Sheep's head Mutton Black pudding	5·10 1·95 2·17 1·33 1·95 2·83 ·95 1·25 ·62 ·33 ·37	226·8 680·4	226·0 25·22 310·35 318·09 308·45 245·06 453·91 120·24 198·57 101·49 88·02 53·75 21·77	41.96	
	Bread  Bread  Broones, &c  Meal  Corn flour  Barley  Potatoes  Potatoes  Curnips  Cabbage  Haricot beans  Sugar  Jam  Syrup	1.81 .91 .55 .08 .02 .1.83 .17 .17 .17 .12 .15 .135	34587·0 3492·72 2354·18 512·57 226·8 27·22 19023·98 3206·95 426·38 739·37 1247·4 226·8 3229·63 1955·02 1106·78	2470·92 3182·0 370·23 379·02 36·39 19·28 2·18 342·43 28·86 109·58 10·35 17·46 51·03 — 11·73 26·56 4587·10	449·63 268·94 169·50 6·66 2·49 ·08 19·02 3·21 4·26 2·22 2·49 4·08 — 1·95	1589·07 401·85 176·45 21·50 2796·52 182·80 252·42 65·80 59·87 135·17 3229·63 1651·99 767·0
	Total	40.16	104957.92	7058.02	2   5508.55	31917.82

## No. LVII.

	NO.	TA TT			
			WEIGHT	USED.	
KIND OF FOOD MATERIAL.	Total Cost	m 170 . 1		Nutrients	
KIND OF POOD MATERIAN.	in Shil- lings.	Total Food   Material in Grams.	Protein	Fat	Carbohydrates in Grams,
			in Grams.	in Grams.	in Grams,
Animal.—Eggs	.41	300.0	35.7	27.9	_
Butter Cheese	$2.33 \\ .56$	$1106.78 \ 312.98$	$11.07 \\ 86.69$	940·76 115·18	12.83
Milk	2.12	9639:0	318.09	385.56	481.95
Buttermilk	.83	5670.0	170.10	28:35	272.16
Findon haddock	:87	$\frac{1646.57}{1900.58}$	$265.10 \\ 317.40$	6·59 5·70	_
Cod Herring	$\begin{vmatrix} 1.0 \\ .25 \end{vmatrix}$	879.98	98.56	34.32	
Bacon	2.17	1587.6	360.38	415.95	
Dripping	12	$127.01 \\ 821.02$	146.96	$124.091 \\ 255.34$	
Minee Mutton	1.33	1360.8	322.51	251.75	_
Sheep's heart	.21	226.8	38.33	28.58	100.00
Sausages	1.41	1501.42	256.74	351·33 112·64	106.60
Rabbit Beef	·75 3·29	1161·22 2694·38	$\begin{bmatrix} 248.50 \\ 501.15 \end{bmatrix}$	536.18	_
Black pudding	.21	226.8	$7.\overline{26}$	36.74	9:30
	18.73	31162:94	3184.54	3656.96	882.84
VEGETABLE.—Bread	5.52	24140.59	222.93	313.83	12818.65
Meal	1.21	3488.18	561.60	251.15	2354·52 1138·63
Scones, &e Barley	1:33	3547·15 453·6	376.0	273.13 $4.99$	352.90
Barley Potatoes	2.46	22929.48	412.73	22.93	3370.63
Onions	21	925:34	12.95	2·78 6·17	82·35 351·63
Turnips Peas	.54	6168·96 453·6	55.52	4.54	281.23
Lentils	1 .17	453.6	116.57	4.54	268.53
Sugar	2.64	5728.97	2.72	•45	5728.97 $383.29$
Jam	$\frac{.25}{14.75}$	453·6 68743·07	3909.16	884.51	27131 33
Total,	33.48	99906.01	7093.70	4541.47	28014.17
	-	LVIII.			
Animal.—Eggs	5.66	3300.0	392.7	306.9	_
Butter	3.91	1533.17	15.33	$\begin{vmatrix} 1303.19 \\ 725.76 \end{vmatrix}$	907.20
Milk	1.0	18144·0 1841·62	598.75	3.68	
Haddock Kippered herring	54	707.62	167.70	24.06	_
Baeon	1.0	453.6	102.97	118.84 57.61	_
Dripping	4.95		590.59	631.86	
Beef Mince	1.83	1360.8	243.58	423.21	_
Mutton	•58	453.6	107.50		11:34
Liver	92.06	453·6 31482·18	$\frac{91.05}{2465.45}$		918.54
D 1	$\frac{23.96}{4.02}$	-	1371.29	-	7914.71
VEGETABLE.—Bread Scones, &c	0.00	6019.27	638.04	463.48	1932.18
Corn flour	17	199.58	14.17		156·47 1282·89
Meal	.01		305.99		596.14
Flour Rice	.10	167.83	13.43	.50	132.58
Potatoes	1.41	14029.85	252·54 59·60		
$\operatorname{Turnips} \dots \dots \dots \dots \dots$	.01		13.91	2.98	88.41
Onions ··· Peas ···	. 14	226.8	55.79	2.27	000 00
Lentils	. 17	453.6	116.57	4.54	4000.75
Sugar	1 .77		70.76		2043.24
Syrup Currants	. 08	140.62	3.37	2.39	
Raisins	. 2		$\frac{5.22}{3011.17}$		
	14.4			4537.83	
Total	. 38.43	3 85111.30	1 8470 02	4 4007 00	

## No. LIX.

			WEIGHT	USED.		
	Total Cost		Nutrients.			
KIND OF FOOD MATERIAL.	in Shil- lings.	Total Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbohydrates in Grams,	
Animal.—Eggs  Butter Milk Cod Bacon Dripping Beef Sausages Mutton Veal Black pudding	5·5 3·64 1·0 1·0 1·46 ·12 1·25 1·12 1·0 2·0 1·46 19·55	3650·0 1419·77 4536·0 2440·37 793·8 113·4 852·77 1020·6 793·8 2721·6 1587·6	434·35 14·20 149·69 407·54 180·19 — 158·61 174·52 188·13 421·85 50·80 2179·88	339·45 1206·80 181·44 7·32 207·97 110·79 169·70 238·82 146·85 215·01 257·19	226·80	
Vegetable.—Bread Scones, &c Flour Potatoes Onions Sugar	1·83 1·17 ·19 ·58 ·08 ·58 -4·43	6804·0 2422·22 793·8 7316·57 453·6 1247·4	625·97 256·75 90·49 131·70 6·35 — 1111·26	88·45 186·51 7·94 7·32 1·36 — 291·58	3612·92 777·53 596·14 1075·53 40·37 1247·4 7349·89	
Total	23.98	38967:30	3290.14	3372.92	7714.24	
	No	. LX.				
Animal.—Butter Cheese Milk Haddock Beef	3:75 :21 2:08 :58 2:5 9:12	1587·6 113·4 9639·0 1134·0 1814·4	15·89 31·41 318·09 95·26 337·40 798·05	1349·46 41·73 385·56 2·27 361·06 2140·08	4:65 481:95 — — 486:60	
VEGETABLE.—Bread Flour Meal Rice Corn flour Potatocs Cabbage Sugar	3·25 ·5 ·12 ·08 ·37 ·12 1·46 6·40	11793·6 1587·6 1587·6 453·6 58·97 3175·2 907·2 3175·2 22738·97	1085·01 180·99 255·60 36·29 4·19 57·15 12·70 — 1631·93	153·32 15·88 114·31 1·36 ·77 3·17 1·81 —	6262·40 1192·29 1071·63 358·34 46·23 466·75 43·54 3175·2 12616·38	
Total	15.52	37027:37	2429.98	2430.70	13102.98	

#### APPENDIX III.

Weights and Percentages of Food Materials, Nutritive Ingredients, and Energy supplied per Man per Day in Dietary Studies.

No. I.

		WEIOH	ITS.				Percentages of Total Food,					
Kind of Food		N	lutrients	3.	Energy Value	Cost		N	utrients.			
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	in Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard. &c.	132·92 58·43	24·1 13·2	27·8 15·3	<u>-</u>		2·47 1·46	P. ct. 7·7 3·4	P. ct. 19·2 10·5	P. ct. 22.7 12.5	P. ct6	P. ct.	P. ct. 21.4 12.7
Poultry          Fish          Eggs          Butter          Cheese          Milk          Buttermilk	$\begin{array}{c} -\\ 7.43\\ 122.72\\ 42.02\\ 17.70\\ 250.80\\ 103.27 \end{array}$	1·1 14·6 ·4 4·9 8·3 3·1	11·4 35·7 6·5 10·0 0·5	- - - 12:5 4:9		·06 2·41 1·31 ·37 ·67 ·18	$ \begin{array}{c c} \hline 0.4 \\ 7.1 \\ 2.4 \\ 1.0 \\ 14.5 \\ 6.0 \end{array} $	-9 11:7 :3 3:9 6:6 2:5	9·3 29·1 5·3 8·1 4			20 · § 11 · 4 3 · 2 5 · 8 1 · 6
Total animal food	735.29	69.7	107.2	20.9	1368.5	8.93	42.5	55.6	87:4	4.7	39.4	77:
Cereals	504:31	49.7	15.1	253.6		1.74	29.1	39.7	12:3	57.1		151
Sugars and starches Vegetables Fruits	121·0 369·73	5.9		121·0 48·9		·45 ·41 —	7·0 21·4 —	$\begin{bmatrix} -4.7 \\ -4 \end{bmatrix}$	_ 	27·2 11·0		3:
Total vegetable food	995:04	55.6	15.5	423.5	2108:3	2.6	57.5	44.4	12.6	95.3	60.6	22.
Total food	1730.33	125.3	122.7	444.4	3476.8	11.53	100.0	100.0	100.0	100.0	100.0	100
Beverages, condiments, &c	15:46	-	_	_	_	•54	-	_	_		_	
					No. I	I.					1	
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter	89·04 11·59 — 181·79 6·80 46·37	2·6  20·8 0·8 0·4	20·9 3·0 - 3·6 0·6 39·4			·93 ·30 ·26 ·10 ·54 ·25	5·2 ·7 -10·6 ·4 2·7 ·8	12.6 2.0 — 15.3 6 3	$ \begin{array}{c} 23.6 \\ 3.4 \\ -4.1 \\ .7 \\ 44.6 \\ 5.7 \end{array} $	_ _ _ _ _ _ _		15: 4:  4: 1: 8: 4:
Cheesc Milk Condensed milk	13.60 48.29 38.64	1.5	5·0 1·9 0·1	2.4		13	2·8 2·2	3.2	2:1	2.6		2· 5·
Total animal food	436.12	51.0	74.5	19.7	982.7	2.84	25.4	37.6	84.3	3.1	24.5	46
Cereals	921:09		13.2	450.5		2.46	48.4	57.7	15.3	70.4		39.
Sugars and starches Vegetables Fruits	131·40 316·91		0.4	130·2 39·7 —		·54 ·33 —		4.7		20·3 6·2 —		S: 
Total vegetable food	3 3070.20	84.7	13:9	620.4	3020.3		-	-	15.7	96.9	-	53.9
Total food	. 1715.5	1 135.7	88 4	640.1	4003.0	6.17	100.0	100.0	100.0	100.0	100.0	100
Beverages, condiments, &c	11:59	9 -		_	_	•38	-	_	_	_		-

## No. III.

_												
		Weig	HTS.					Perce	NTAGES (	of Total	Food.	
KIND OF FOOD	Food		Nutrient	s.	Energy Value	Cost	77 . 1	]	Nutrient	s.	Energy	
Material.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	Calorics.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
Bcef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Gutter Cheese Milk Condensed milk	33·58 — 89·55 24·63 26·64 2·91 167·88 22·38	6·1 — 10·6 2·9 0·2 0·8 5·5 2·5	$ \begin{array}{c c} 7 \cdot 9 \\ - \\ 1 \cdot 8 \\ 2 \cdot 2 \\ 22 \cdot 6 \\ 1 \cdot 0 \\ 6 \cdot 7 \\ 0 \cdot 1 \end{array} $	- - - - 0·1 8·3 9·7		·66 - ·49 ·39 ·59 ·04 ·44 ·19	P. ct. 2·4 — 6·4 1·7 1·9 ·2 12·0 1·6	P. ct. 7 · 3 — 12 · 8 3 · 5 · 2 1 · 0 6 · 6 3 · 0	P. ct. 16·0 — 3·7 4·5 45·9 2·0 13·6 ·2	P. ct. — — — — — — — — — — — — — — — — — — —	P. ct.	P. ct. 11·3  - 8·4 6·6 10·1 ·7 7·5 3·2
Total animal food	367.57	28.6	42:3	18.1	584.8	2.80	26.2	34.4	85.9	3.7	20.2	47.8
Cereals Sugars and	527.48	48.2	6.6	293.0		1.67	37.6	57.9	13.4	57.4		28.5
starches Vegetables Fruits	159·41 347·25 —	0·3 6·1	.06 0.3 —	149·2 50·0 —		·83 ·56	11·4 24·8	$\begin{array}{c c} -4 \\ 7.3 \\ - \end{array}$	-6 -6	29·2 9·7 —		14·2 9·5
Totalvegetable food	1034.14	54.6	6.96	492.2	2306.6	3.06	73.8	65.6	14.1	96.3	79.8	52.2
Total food	1401.71	83.2	49.26	510.3	2891.4	5.86	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	14.10	_		_	_	•49		_	-		_	
				]	No. IV							
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese Milk	131·67 39·55 — 90·32 — 15·31 5·39 386·45	24:3 6:9 	27·0 9·9 — 1·9 — 13·0 1·9 15·4	0·4 - - - - 0·2 19·3		2·26 ·65 — ·35 — ·40 ·09 1·01	$ \begin{array}{c} 5.8 \\ 1.7 \\ - \\ 4.0 \\ - \\ .2 \\ 17.1 \end{array} $	17.6 5.0 - 7.6 - 1 1.1 9.0	$ \begin{array}{c} 31.0 \\ 11.4 \\ \hline 2.2 \\ 14.9 \\ \hline 2.2 \\ 17.7 \end{array} $	-1 - - - - - 3·1		$ \begin{array}{c} 26.0 \\ 7.5 \\ \hline -4.0 \\ \hline -4.6 \\ 1.0 \\ 11.6 \end{array} $
Total animal food	668.69	55.9	69.1	19.9	953·4	4.76	29.5	40.4	79.4	3.2	24.6	54.7
Cereals Sugars and starches Vegetables Fruits	707·49 133·4 755·46	69·2 0·1 13·0	17·1 	366·5 128·5 96·2		2·26 ·64 1·05	31·2 5·9 33·4	50·1	19.6	60·0 21·1 15·7		25·9 7·3 12·1
Total vegetable food	1595•99	82.3	18:0	591.2	2928:7	3.95	70.5	59.6	20.6	96.8	75.4	45.3
Total food	2264.68	138.2	87:1	611.1	3882·1	8.71	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	8:34					•35	_	-			-	_

## No. V.

		Weign	TS.					Percen	rages of	TOTAL	Foon.	
KIND OF FOOD	771	N	utrients		Energy Value	Cost		N	utrients.		75	
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c.	78.92	15:0	13.3	0.8		1.57	P. ct. 4.8 —	P. ct. 13.0	P. ct. 19·5	P. et. 2	P. ct.	P. ct.
Poultry Fish Eggs Butter	40.99 103.83 40.38 23.16	$ \begin{array}{c c} 5.6 \\ 8.9 \\ 4.8 \\ 0.2 \end{array} $	5·0 0·5 3·9 19·6			·78 ·38 ·53 ·74	$egin{array}{c} 2.5 \ 6.4 \ 2.5 \ 1.4 \ \end{array}$	$egin{array}{c c} 4.9 & \\ 7.7 & \\ 4.2 & \\ 2 & \\ \end{array}$	7·3 ·7 5·7 28·8	_		$   \begin{array}{c}     98 \\     4.8 \\     6.6 \\     9.2   \end{array} $
Cheese Milk	305.84	10.0	12.2	15:3		-80	18.7	8.7	17.9	2.8		10.0
Total animal food	593·12	44.5	54.2	16.1	755.3	4.8	36.3	38.7	79 9	3.0	22.9	60.0
Ccreals Sugars and	656.66	64.8	12.1	373.0		2.06	40.2	56.3	17.8	69.5		25·7 6·0
starches Vegetables Yeast Fruits Oil	$ \begin{array}{c c} 109.16 \\ 266.58 \\ 2.70 \\ 3.32 \\ 1.13 \end{array} $	5·4 ·3 ·04	0·4 ·01 ·04 1·1	109·0 37·1 ·5 0·8		·48 ·59 ·04 ·02 ·01	6:7 16:3 ·2 ·2 ·1	4·7 ·3 —		6·9 ·1 ·2		7·4 ·5 ·3 ·1
Total vegetable food	1039:55	70.54	13.65	520.4	2549.7	3.20	63.7	61.3	20.1	97:0	77:1	40.0
Total food	1632.67	115.04	68.15	536.5	3305.0	8.0	100.0	100.0	100.0	100.0	100.0	100 0
Beverages,condi- ments, &c	10.94				_	•52	-	_	_	_	_	
					No. V	I.		1	1			1
Beef, veal, mutton, &c. Pork, lard, &c.	84.86	15.5	19.1	0.7		1.33		16.0	21.2	-2		17·0 — 10·5
Poultry Fish Eggs Butter	35.65 76.88 23.80 38.38	$\begin{array}{c c} 14.2 \\ 2.8 \end{array}$	$ \begin{array}{c c} 4 \cdot 3 \\ 0 \cdot 9 \\ 2 \cdot 2 \\ 32 \cdot 6 \end{array} $	-		·82 ·46 ·41 1·18	5·7 1·7	5·0 14·7 2·9 ·3	4·8 1·0 2·4 36·1			5·9 5 3 15·1
Cheese Milk Buttermilk	213.53	$\frac{1}{7.0}$	8·5 0·3	10.6		- -55 -12		7.2	9.4	2.7		7·1 1·5
Total animal	F 44.05	46.7	67.9	14.7	883 :	2 4.87	40.2	48.3	75.2	3.8	-	62.4
Cereals	428.98	3 43.6	15.0	210.7	7	1.58		45.0	16.6	54·4 31·3		19·9
Sugars and starches Vegetables Fruits Oil	$\begin{array}{c c} 245.58 \\ 5.0 \\ 7.0 \end{array}$	$\begin{bmatrix} 6.4 \\ 1 \end{bmatrix} = \begin{bmatrix} 6.4 \\ .09 \end{bmatrix}$	0.4	121·1 37·6 3·6 —	;	·6· ·0s ·1:	18·1 3 ·4	1	7.8	9.7		8:22
Total vegetable	27.11.11	8 50.1	22.4	372	4 1940			-	24.8		_	37.0
Total food	. 1353:3	5 96.8	90.3	387	1 2823	8 7.8	1 100.0	100.0	100.0	100.0	100.0	100
Beverages, condiments, &c	i. 11:3	9 -	_	_		.5	3 -	-				-

## No. VII.

		WEIG	HTS.					Peroe	NTAGES (	OF TOTAL	Food.	
KIND OF FOOD		]	Nutrient	3.	Energy Value	Cost			Nutrient	3.		
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	in Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c.	96.61	17.6	24.3			1.51	P. ct. 4.6	P. ct. 12·1	P. ct. 18.2	P. ct.	P. ct.	P. ct.
Pork, lard, &c. Poultry	114:40	15.6	14·0			1.82	<u>-</u> 5·5	10.7	10.5	_		16.7
Fish	243·74 17·14	$\frac{21.5}{2.0}$	2·8 1·5	_		·94 ·34	11.6	14.8	$\frac{2\cdot 1}{1\cdot 1}$			$\begin{vmatrix} 8.6 \\ 3.1 \end{vmatrix}$
Butter	51.94	$0.\overline{2}$	44.1	_		1.53	2.5	3	33.0	_		14.1
Milk	373.25	12.3	14 9	18.6		•97	17.8	8.2	11.1	3.3		8.9
Total animal food	897.08	69.5	101.6	18.6	1306.0	7:11	42.8	47.8	76.0	3.3	31.5	65:3
Cereals Sugars and	693.95	69.4	19.0	364.1		2.27	33.1	47.8	14.2	64.7		20.9
starches Vegetables Oil	131 ·41 361 ·26 12 98	<u>6</u> ·4	0:3 12:9	129·1 51·4 —		·65 ·56 ·28	6·3 17·2 ·6	- 4·4 -	 9.6	22·9 9·1 —		$ \begin{array}{c c} 6.0 \\ 5.2 \\ 2.6 \end{array} $
Total vegetable food	1199.60	75.8	32.2	544.6	2843.1	3.76	57.2	52.2	24.0	96.7	68.5	34.7
Total food	2096:68	145:3	133.8	563.2	4149.1	10.87	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	12:98	_	-		-	.60	-		-	-	_	
				N	o. VI	II.						
Beef, veal, mutton, &c. Pork, lard, &c.	65·97 —	8.7	27.7	<u> </u>		1·25 —	4·4 —	10.8	35·9 —	_		18.5
Poultry Fish	— 114·55	10.4	0.5	_		- ·58	8.0	13.0	·6	_		$\frac{-8.6}{}$
Eggs Butter	26·78 21·79	$\begin{array}{c} 3.1 \\ 0.2 \end{array}$	$\begin{array}{c} 2.4 \\ 18.5 \end{array}$	_		·53 ·75	1.9	3.9	$\frac{3\cdot 1}{24\cdot 0}$			7·8 11·1
Cheese Milk	11.59 304.28	$\frac{3.2}{10.0}$	4·2 12·1	$\begin{array}{c} 0.4 \\ 15.2 \end{array}$		·12 ·81	21·3	$\frac{4.0}{12.5}$	5·4 15·7	3·8		1.8
Total animal food	544.96	35.6	65.4	15.6	818.1	4.04	38.0	44.4	84.7	3.9	30:3	59.8
Cereals	409:39	3s·7	11.5	202 4		1:52	28.8	48.2	14.9	50.1		22.4
Sugars and starches Vegetables Fruits	136·92 334·73	<u>-</u> 5·9	0.3	136·9 48·7		•68 •53	9·7 23·5	- 7·4	- <sub>-4</sub>	33·9 12·1		10·0 7·8
Total vegetable food	881.04	44.6	11.8	388.0	1883:4	2.73	62.0	55.6	15:3	96·1	69.7	40.2
Total food	1426.0	80.2	77.2	403.6	2701.5	6:77	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	11:59	_				·61				_	_	

## No. IX.

				1	10. 121							
		WEIGH	ITS.					PEROEN	TAGES OF	TOTAL	FOOD.	
KIND OF FOOD	Food	N	utrients		Energy Value	Cost		N	utrients.		Energy	
MATERIAL.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Penee.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	124·91 50·24	22·3 9·1 —	26·8 12·6	3.9		2·07 ·77 —	P. ct. 9:8 3:9	P. ct 28:4 11:6 —	P. ct. 33·1 15·6 —	P. ct. 1·1 —	P. ct.	P. ct. 29·6 11·0
Fish Eggs Butter Cheese	27·95 30·91	3.3	$     \begin{array}{c c}                                    $				$\begin{array}{ c c c }\hline & - & \\ & 2 \cdot 2 \\ & 2 \cdot 5 \\ & - & \\ & 15 \cdot 2 \end{array}$	$\begin{bmatrix} -4.2 \\ -3 \\ -8.1 \end{bmatrix}$	$ \begin{array}{c c}  & - \\  & 3 \cdot 2 \\  & 32 \cdot 3 \\  & - \\  & 9 \cdot 5 \end{array} $			$     \begin{array}{c c}                                    $
Milk	194.03	6.4	7.7	9.7		4.0	10 2					
food	428.04	41.3	75.9	13.6	930.9	4.85	33.6	52.6	93.7	3.9	37.5	$\frac{69.3}{14.0}$
Cereals Sugars and	301.77	29.4	4.6	172.8		98	23.7	37.5	5.7	50.2		9.4
starches Vegetables Fruits	101:34 444:47 —	0·3 7·5 —	0.5	100·3 57·3		·51	34.8	9.5		16.7		7.3
Total vegetable food	847:58	37.2	5.1	330.4	1554.6	2.15	66.4	47.4	6.3	96.1	62.5	30.7
Total food	1275.62	78.5	81.0	344.0	2485.5	7:0	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	7.05		_	_	_	.30	_		_	-	_	_
	'				No. X	<b>.</b>		1	1	1	<u> </u>	1
Beef, veal, mutton, &c. Pork, lard, &c.	109.58		4.8			1.38			46.5 8.9	-5		24·4 ·5
Poultry Fish Eggs Butter	219·39 7·51 14·46	$\begin{bmatrix} 0.8 \\ 0.1 \end{bmatrix}$	$\begin{vmatrix} 0.6 \\ 12.2 \end{vmatrix}$			·77 ·11 ·49 ·24	1.1	3·0		<b>—</b>		13.6 1.9 8.7 4.3
Cheese Milk (condensed				2.4		-05	- 4					
Total animal food	979.0	$\begin{bmatrix} 1 \\ 3 \end{bmatrix}$ $52 \cdot 2$	2 47.8	8 4.6	677.4	3.07	28.1	50.5		_	_	
Cereals	. 441 4	0 43.3	3 5.4	4 250.8	3	1.53			10.0			27.0
Sugars and starches Vegetables	. 446.5	2   7.8		58.4 54.6 0.3	3	·38 ·46 ·22	33.0	$3 \mid 7.5$		15.8 14.8 	3	S·1 3·9
Total vegetable food		9 51	2   6	0 364	1 1758	2.59		_		_		
Total food	. 1327 ·9	2 103	4 53	8 368	7 2435	5.60	6 100.	0 100.0	100.0	100.0	0 100 0	100.0
Beverages, cond ments, &c	4.8	39		1	-	.1,	7   -	-	-		1-	-

## No. XI.

		WEIG	HTS.					Perce	NTAGES	OF TOTAL	Food.	
Kind of Food	To	]	Nutrient	S.	Energy Value	Cost		]	Nutrient	s.	E	
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	164·52 5·14	29.9	36·8 1·3	5.7		1.98	P. ct. 11.6 .4	P. ct. 24:0 -9	P. ct. 44.8 1.6	P. ct. 1·1 —	P. ct.	P. ct. 24·9 1 2
Fish Eggs	157:73	15.6	8.1	27.7		1.03	11.1	12.5	9.9	5.2		12.9
Butter Cheese Milk	15·42 5·14 154·20	$\begin{bmatrix} 0.1 \\ 1.4 \\ 5.0 \end{bmatrix}$	13·1 1·8 6·1	0·2 7·6		·31 ·09 ·40	1·1 ·4 10·8	1·1 4·0	15·9 2·2 7·4	<u>-</u> 1·4		4·0 1·1 5·0
Total animal food	502.15	53.1	67.2	41.2	1011.6	3.90	35.4	42.6	81.8	7.7	29.1	49.1
Cereals Sugars and	696.96	69.7	14.8	375.8		2.86	49.1	55.9	18.1	70.1		35.9
starches Vegetables Fruits	106·32 113·11 2·05	- 1.8 0.1	<u>0.1</u>	104·1 14·2 0·8		·83 ·17 ·20	7·5 7·9 ·1	- 1·4 ·1		19·4 2·6 ·2		10·4 2·1 2·5
Total vegetable food	918.44	71.6	14.9	494.9	2461.2	4.06	64.6	57:4	18.2	92.3	70.9	50.9
Total food	1420:59	124.7	82·1	536.1	3472.8	7.96	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	10.07					•39						_
				N	o. XI	I.						
Beef, veal, mutton, &c. Pork, lard, &c. Black pudding Fish Eggs Butter Cheese Milk Buttermilk	166·23 10·37 10·37 41·50 41·09 18·26 15·56 259·36 77·80	31·8 2·3 0·3 6·9 4·8 0·1 4·2 8·5 2·3	33·1 2·7 1·6 0·1 3·8 15·5 5·7 10·3 0·3	0·7 		1.95 .18 .09 .18 .70 .27 .29 .68 .13	9·0 ·6 ·6 2·3 2·2 1·0 ·8 14·1 4·2	23·7 1·7 ·2 5·1 3·6 ·1 3·1 6·3 1·7	36.7 3.0 1.8 0.1 4.2 17.2 6.3 11.5	$\begin{array}{c c} & \cdot 1 & \\ & - \\ & \cdot 1 & \\ & - \\ & - \\ & \cdot 2 \cdot 6 \\ & \cdot 7 & \end{array}$		25 8 2·4 1·2 2·4 9·3 3·6 3·9 9·0 1·7
Total animal food	640.54	61.2	73·1	18:3	1005.8	4.47	34.8	45.5	81.1	3.6	29.5	59.3
Cereals Sugars and	622.60	63.0	16:3	<b>3</b> 30·5		2.12	33.9	46.9	18:1	67.2		28.1
starches Vegetables Fruits	83:01 492:89 —	10.2	0.7	 83.0		·49 ·46 —	4·5 26·8 —	$\begin{bmatrix} -7.6 \\ - \end{bmatrix}$	- .8 -	16·9 12·3 —		6·5 6·1
Total vegetable food	1198.5	73.2	17.0	473.8	2400.8	3.07	65.2	54.5	18.9	96.4	70.5	40.7
Total food	1839:04	134 4	90.1	492.1	3406.6	7.54	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	10.37	-	-		_	.36		- 1	_		_	-

74

## No. XIII.

					J. 2XXX							
		WEIGH	ITS.					Percent	FAGRS OF	TOTAL	Food.	
KIND OF FOOD	77	N	utrients.		Energy Value	Cost		Nı	itrients.	1	Energy	
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	47 7	Cost.
Beef, veal, mutton, &c. Pork, lard, &c.	111·76 56·58	20·5 10·7	24·7 17·7	1:3		1·3 1·06	P. ct. 7:5 3:8	P. ct. 17 8 9 3	P. ct. 30·2 21·6	P. ct. 3	P. ct.	P. ct. 18·6 15·2
Poultry Fish Eggs Butter Cheese Milk Condensed milk	23·18 45·91 16·69 10·89 115·91 9·39	2·8 5·4 0·1 3·0 3·8 1·0	$ \begin{array}{c c}  & - \\  & 4 \cdot 2 \\  & 14 \cdot 1 \\  & 4 \cdot 0 \\  & 4 \cdot 6 \\  & - \\ \end{array} $	$ \begin{array}{c c} - & \\ \hline 0 & 4 \\ 5 & 7 \\ 4 & 1 \end{array} $		·14 ·68 ·50 ·20 ·30 ·08	1.5 3.1 1.1 .7 7.8 .6	2·4 4·7 ·1 2·6 3·3 ·9		- - 1·2 ·0		2·0 9·8 7·2 2·9 4·3 1·1
Total animal food	390:31	47:3	69.3	11.5	885.6	4.26	26.1	41.1	84.7	. 2.5	27.8	61 1
Cereals	603.71	59.2	11.9	327:3		1.74	40.4	51.5	14.5	68.9		24.9
Sugars and starches Vegetables Fruits	77.56 410.32 11.59	8.3	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	75·7 52·3 8 2		·38 ·48 ·12	5·2 27·5 ·8	72	-6 ·2	15·9 11·0 1·7		5·4 6·9 1·7
Total vegetable food	1100.10	67.7	12.6	463.5	2295·1	2.72	73.9	58.9	15:3	97.5	72.2	38.9
Total food	1493.49	115.0	81.9	475.0	3180.7	6.98	100.0	100.0	100.0	100 0	100.0	100.0
Beverages, condiments, &c	8.69	0 -	_		_	.30	_	-	_	_	_	_
				N	o. XI	V.				1	1	
Beef, veal, mutton, &c Pork, lard, &e.	10.0					·49 ·24		2.0	21·3 7·1 —	_		$ \begin{array}{c c} 11.4 \\ 5.6 \\ - \\ 1.7 \end{array} $
Poultry Fish	$\begin{vmatrix} & & & & & & & & & & & & & & & & & & &$	$6 \begin{vmatrix} 2 \cdot 2 \\ - \end{vmatrix}$	_	-		-07	1 -	_	$\frac{1}{42}$	-		$\frac{1}{9.6}$
Eggs  Butter  Cheese  Milk	$\begin{array}{c c} 27.9 \\ 2.6 \\ 106.4 \end{array}$	6 0.7	7 0.9	0.1		·41 ·04 ·28		2 8	1.6	-	2	6.5
Total anima	al 224·9	06 21.	4 45.	6.0	531.8	1.53	19:	_	-			35.7
	632.6	60.	7 10.0	$6 \overline{340.3}$		2.08						48·7 6·3
Sugars and starches . Vegetables .	49·8 267·5			$\begin{bmatrix} 47.1 \\ 44.1 \\ - \end{bmatrix}$		·2':				9 10.8		9:3
Total vegetab		08 69	9 11.	1 431.5	2159	2.70	80	8 76.6	19:8	_		
Total food		04 91	3 56	$2 \overline{437} \cdot 8$	5 2690	8 4.2	9 100	100.0	100.0	0 100.	0 100.0	100.0
Beverages, cone	li-	59 -	-		_	•2	3 -		-	_	-	

## No. XV.

		WEIO	нтз.					Peros	NTAGES O	F TOTAL	Food.	
17 17			Nutrient	s.	Energy Value	Cost		1	Nutrients	3.		
KIND OF FOOD MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	in Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories,	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Black pudding Fish Eggs Butter Cheese Milk Buttermilk	84 ·24 14 ·47 7 ·23 43 ·56 27 ·07 45 ·16 162 ·80 36 ·17	16·7 3·2 0·2 7·8 3·2 0·4 — 5·3 1·1	$ \begin{array}{c} 17.1 \\ 3.7 \\ 1.1 \\ 0.1 \\ 2.5 \\ 38.3 \\ \hline 6.5 \\ 0.1 \end{array} $	1·5 		.92 .38 .06 .25 .49 1.41  .44	P. ct. 6 · 1 1 · 0 · 5 3 · 2 2 · 0 3 · 3 — 11 · 8 2 · 6	P. ct. 17·1 3 ·3 ·2 8·0 3 ·3 ·4 - 5·4 1·1	P. ct. 21 · 5 4 · 6 1 · 4 · 1 3 · 1 48 · 0 - 8 · 2 · 1	P. ct3 1 · 9 · 4	P. ct.	P. ct. 13.7 5.6 .9 3.7 7.3 20.9 - 6.5 .6
Total animal food	420.70	37.9	69.4	11.5	848.0	3.99	30.5	38.8	87.0	2.6	28.9	59 -2
Cereals Sugars and	445.23	44.7	9:5	248.2		1.57	32.2	45.7	11.9	56.8		23.4
starches Vegetables Fruits	120·28 394·57 —	0·8 14·4 —	0·1 0·8 —	118·1 59·6 —		·63 ·54 —	8·7 28·6	·8 14·7 —	1:0	27·0 13·6 —		9·4 8 0
Total vegetable food	960.08	59.9	10.4	425.9	2088:5	2.74	69.5	61.2	13.0	97:4	71.1	40.8
Total food	1380.78	97.8	79.8	437.4	2936.5	6.73	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	16:35	_	-	_	_	.71	_	_	_	-		_
				N	o. XV	T.						
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese Milk	203·04 55·33 — 40·58 43·38 — 202·85	39:4 11:1 — 4:8 0:4 — 6:6	43·7 14·2 — 3·7 36·8 — 8·1	2.0		. 2·44 1·39 — - ·81 1·52 — ·45	$ \begin{array}{c c} 11.6 \\ 3.2 \\ - \\ 2.3 \\ 2.5 \\ - \\ 11.6 \end{array} $	31.7 8.9 — 3.9 .3 — 5.3	37·0 12·0 — 3·1 31·1 — 6·9	-4 - - - - - 2.0		23·9 13·6 — — 7·9 14·9
Milk  Total animal	202 00		0.1							2.0		4.4
food	545.18	62.3	106.5	12.1	1295.5	6.61	31.2	50.1	91.1	2.4	35.2	64.7
Cereals Sugars and starches Vegetables Fruits	500·83 160·55 541·71	50·7 0·3 10·9 —	10·9 - 0·8 -	277·0 152·5 64·3		1·86 1·13 ·62 —	28·6 9·2 31·0 —	40·8 -3 8·8	$egin{array}{c} 9 \cdot 2 \ - \ \cdot 7 \ - \ \end{array}$	54·8 30·1 12·7	_	18·2 11·0 6·1 —
Total vegetable food	1203 09	61.9	11.7	493.8	2387.2	3.61	68.8	49.9	9.9	97.6	64.8	35.3
Total food	1748:27	124.2	118.2	505.9	3682.7	10.22	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	12:10			. —		·47	-	-	_	_	_	_

#### No. XVII.

		Weion	TS.					Percen	TAGES OF	TOTAL	Food.	
KIND OF FOOD	Trand	N	utrients.		Energy Value	Cost		N	utrients.		Encrey	
Material.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calorics.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy' Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c.	111·78 4·17	20.7	19.6	10		1·22 ·05	P. ct. 8·4 ·3	P. ct. 20·1	P. ct. 30.9 6.3	P. ct. 2	P. ct.	P. ct. 22:5 ·9
Poultry     Fish       Eggs       Butter     Cheesc	83·54 5·51 25·06	10·8 0·6 0·2	$ \begin{array}{c c} \hline 0.2 \\ 0.5 \\ 21.3 \\ - \end{array} $	_		·49 ·09 ·51	6·3 ·4 1·9	10·5 ·6 ·2	·3 ·8 33·5	_ _ _ _		9·0 1·7 9·4
Milk	125.29	4.1	5.0	6.2			9.5	3.9	7.9	1.3		5.4
Total animal food	355:35	36.4	50.6	7.2	649 3	2.65	26.8	35.3	79.7	1.5	22.2	48.9
Cereals	638.13	63.1	12.6	350.9		1.94	48.1	61.3	19.8	75.0		35.8
Sugars and starches Vegetables Fruits	83·54 248·63	$\begin{bmatrix} -\frac{1}{3\cdot 5} \\ - \end{bmatrix}$	$-\frac{0.3}{}$	83·5 26·3 —		·50 ·33 —	6·3 18·8 73·2	3.4	- - -	17·9 5·6 —		9·2 6·1 —
Total vegetable food	970:30	66.6	12.9	460.7	2281 · 9	2:77	73.2	64.7	20.3	98.5	77.8	51.1
Total food	1325.65	103.0	63.5	467.9	2931.2	5.42	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	6.18		_			20	-		-	<u> </u>	-	_
	1			N	o. XV	III.				1	1	<u> </u>
Beef, veal, mutton, &c. Pork, lard, &c.	138·69 12·44		32·9 5·7	5·7		1.88	9.1		46.5 8.1	1.1		27·8 2·8
Poultry Fish Eggs Butter	16:95 51:58 9:19	$\begin{vmatrix} 6 \cdot 1 \\ - \end{vmatrix}$	$\begin{bmatrix} - \\ 4.7 \\ 7.8 \\ 2.9 \end{bmatrix}$			1:05 :24 :11	1·2 3·4 ·6	5.7	6·6 11·0 4·1			1.6 15.6 3.6 1.6
Checse Milk Buttermilk	180:31	5.9	7.2	9.0		·31 ·10	11.8	5.5	10.2	1.7		4.6
Total animal	104.70	45.5	61.5	18.2	833.1	3.99	31.8	42.5	86.9	3.4	25.6	59.1
Cereals	. 582.91	55.7	8.4	330.7		1.55	38.3		11.9	63.1		23.0
Sugar and starches Vegetables Fruits	311.47	$7 \mid 5.4$	0.4			·70 ·34 ·16	20.4	5.0	.6			10·4 5·1 2·4
Total vegetable		0 61.7	9.2	506.5	2415.2	2.75	68.2			96.6		40.9
Total food	1502.0	107.2	70.7	524.7	3248:3	6.74	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, cond ments, &c	i- 12·6	2 -		_	-	•4:	3 -		-	_	-	

## No. XIX.

			WEIG	HTS.					Peroe	NTAGES	OF TOTAL	Food.	
	Kind of Food	277 - 2	:	Nutrient	s.	Energy Value	Cost		]	Nutrient	s.	Enam	
	MATERIAL.	Food Material in Grams.	Protein in Grams.	C.	Carbo- hydrates in Grams.	in Calorics.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
	Beef, veal, nutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Milk (skim) Milk (condensed) Buttermilk	131·39 — — — — 17·08 85·41 25·62 128·12	26·5 - - 0·1 2·9 2·9 3·8	20·1 — — 14·5 0·2 0·1 0·6	1:5 - - - - 4:3 11:2 6:1		1·38          -	P. et. 6·3 — — — — 8 4·1 1·2 6·1	P. ct. 20·1  2·2 2·2 2·9	P. et. 35·6	P. ct2	P. et.	P. ct. 22·3 — — — — 3 5 3·5 3·5 3·5
0	Total animal food	387.62	36.2	35.5	23·1	573:3	2.26	18.5	27.5	62.9	3.4	15.0	36.3
	Cereals Sugars and starches Vegetables Fruits	714·89 122·85 873·80	78·5 0·2 16·8	19.9	117·5 123·1		2·23 ·78 ·93	34·1 5·8 41·6	59·6 ·1 12·8	35·2 — 1·9 —	60.8 17.5 18.3		36·1 12·6 15·0
	Total vegetable food	1711:54	95.5	21.0	648.8	3246.9	3.94	81.5	72.5	37.1	96.6	\$5·0	63.7
	Total food	2099.16	131.7	56.5	671.9	3820.2	6.50	100.0	100.0	100.0	100.0	100.0	100.0
	Beverages, condiments, &c	11.78	_	-	_	- ,	.39	<u> </u>	- 1	-	_	-	_
			•		N	10. XX	ζ.						
	Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese Milk Condensed milk	181·81 34·93 — 160·46 44·21 46·37 21·33 154·55 34·62	36·3 5·0 	36·9 19·8 — 3·5 4·1 39·4 7·8 6·1 0·1	3·2 - - - 0·8 7·7 15·1		2.58 .81  .84 1.03 .88 .53 .33 .33	8·4 1·6 	19·5 2·7 ———————————————————————————————————	26.6 14.3 — 2.5 3.0 28.4 5.6 4.5	-4 - - - - - 1·9 1·9		$ \begin{array}{c} 19.2 \\ 6.0 \\ \hline 6.2 \\ 7.6 \\ 6.5 \\ 3.9 \\ 2.5 \\ 2.5 \end{array} $
	Total animal food	678.28	92.7	117:7	26.8	1584.5	7:33	31.3	49.8	S5·0	3.3	29 4	54.4
	Cereals Sugars and	883.64	88.2	16:4	483.6		3.55	40.8	47.5	11.8	59.4		26:4
Н	starches Vegetables Truits Dil	278·26 292·17 30·91 4·01	0·3 4·4 0·2 —	0·3 0 1 4·0	268·6 34·2 1·2 —		1.69 .43 .40 .06	12·8 13·5 1·4 ·2	2·4 2·4 ·1 —	$-\frac{2}{2}$	33·0 4·2 ·1 —		12.6 3.2 3.0 .4
	Total vegetable food	1488.99	93.1	20.8	787.6	3804.3	6.13	68.7	50.2	15.0	96.7	70.6	45.6
1	Total food	2167:27	185.8	138.5	814.4	5388.8	13:46	100.0	100.0	100:0	100.0	100.0	100.0
1	Beverages, condi- ments, &c	31.22			-	_	1.15	-			-		

#### No. XXI.

		Wrigh	TS.					Percen	TAGES OF	TOTAL	Гооь.	
KIND OF FOOD	Food	N	utrients		Energy Value	Cost		N	utrients.		12 novem	
Material.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- liy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese Milk	88·73 21·04 — 31·62 22·48 2·79 23·32 210·37	16·2 4·0 — 5·6 2·6 — 6·4 6·9	18.8 7.6 	2·5 — — — — — — 0·9 10·5		1.08 .18  .21 .39 .87 .42 .55	P. ct. 6:7 1:6  2:3 1:7 1:8 15:9	P. et. 17·8 4·4 — 6·2 2·9 — 7·0 7·6	P. ct. 33:3 13:4 — 1:1 3:5 4:1 15:0 14:9	P. et	P. et.	P. ct. 17·4 2·9 — 3·4 6·2 14·0 6·8 8·8
Total animal food	400:35	41.7	48.2	13.9	676.2	3.70	30.2	45.9	85.3	4.0	29·1	59.5
Cereals Sugars and starches Vegetables Fruits	433·69 58·55 432·37	40·9 0·1 8·2	7.7	230·2 54·8 50·1 —		1·50 ·52 ·49 —	32·8 4·4 32·6	45·0 -1 9·0 	13.6	65·9 15·7 14·4		8·4 7·9
Total vegetable food	924.61	49.2	8:3	335.1	1652 8	2.51	69.8	54.1	14:7	96.0	70.9	40:5
Total food	1324:96	90.9	56.5	349.0	2329:0	6.21	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c:	12:38			_		•48	_	_		-	_	_
			0	N	o, XX	II.			1	1	1	
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese Milk	206·65 	$ \begin{array}{c c}  & -9.8 \\  & 26.2 \\  & 5.8 \\  & 3 \\  & 5.1 \end{array} $	$ \begin{array}{c c} 35.1 \\$	$\frac{1}{0.7}$		3·13 	$ \begin{array}{c c}  & - \\  & 3 \cdot 3 \\  & 12 \cdot 7 \\  & 2 \cdot 3 \\  & 1 \cdot 4 \\  & \cdot 9 \end{array} $	5·6 14·9 3·2 ·2	$ \begin{array}{c c} 28.5 \\ \hline 7.1 \\ 1.5 \\ 3.7 \\ 20.7 \\ 5.6 \\ 10.5 \end{array} $	- - - - - - 3·2		25:3 
Total animal food	974.57	_	95:5	16.9	1338.7	8.28	45.3	-	77.6	3.3	33.9	69:
Cereals Sugars and starches Vegetables Fruits Oil	52:31 334:10 9:27	5.3		52 3 39.7 0.3		2·64 ·32 ·40 ·12 ·20	15.6	$\frac{3}{3} \cdot 0$	16.7	78·6 10·3 7·8	1	21·3·3·1·1·1·1·1·1·1·1·1·1·1·1·1·1·1·1·1
Total vegetable	, 1177.0		27.0	492.5	2609:3	3.68	54.7		ļ	96.7		30
Total food	0171.0	1 176.0	123	509.4	3948:0	12.26	100.0	100.0	100.0	100 0	100.0	100
Beverages, cond	i- 14·4					.57	_	_	-	_	-	_

## No. XXIII.

		WBIG	нтѕ.					Perce	NTAOES O	F TOTAL	Food.	
Kind of Food	7712		Nutrients	3.	Energy Value	Cost		1	Nutrients	S.	Froman	
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calorics.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &e. Pork, lard, &e. Poultry Fish Eggs Butter Cheese Milk	110·29 — — 27·57 60·38 155·10	21·3 - - - 0·2 16·7 5·1	21.7 - - 23.4 22.2 6.2	- - - - - - 2·4 7·7		1·45 - - ·48 1·21 ·42	P. ct. 5·6 1·4 3·1 7·9	P. ct. 17·2 — — — — — — — — — — — — — — — — — — —	P. ct. 25 '4	P. et. — — — — — — — — — — — — — — — — — — —	P. ct.	P. ct. 20·9 — — — — — — — — — — — — — — — — — — —
Total animal food	353.34	43:3	73.5	10.1	902.5	3.56	18:0	35.0	85.8	1.7	24.1	51.3
Cereals   Sugars and	627:31	61.0	11.0	340.0		1.77	32.0	49.3	12.9	57.2		25.5
starches Vegetables Fruits	124·08 853·29	$\begin{array}{c c} 0.2 \\ 19.2 \\ - \end{array}$	- 1·1 -	117.6 126.8 —		·75 ·86	6·4 43·6 —	15.5 —		19·8 21·3 —		10·8 12·4 —
Total vegetable food	1604.68	80.4	12·1	584.4	2838.2	3.38	82.0	65.0	14 2	98:3	75.9	48.7
Total food	1958:02	123.7	85.6	594.5	3740.7	6.94	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, eondiments, &c	10:34		_	_		·37		_			_	
				No	o. XXI	V.						
Beef, veal, mutton, &e. Pork, lard, &e. Poultry Fish Eggs Utter Cheese Milk	48·49 — — — 25·08 — 190·48	8·8 - - - 0·2 - 6·2	12·3 — — — 21·3 — 7·6	9.5		·40 — — — ·36 — ·48	$ \begin{array}{c c} 3.9 \\ - \\ - \\ 2.0 \\ \hline 15.3 \end{array} $	13·8 - - - - - - - - - - - - -	25·2 — — 43·7 — 15·6			10·2 — 9·1 — 12·2
Total animal food	264.05	15.2	41.2	9.5	484.4	1.24	21.2	23.8	84.5	2.3	20.1	31.5
Cereals Sugars and starches Vegetables Fruits	435·65 125·54 416·67	41·9 0·3 6·6	7.2	237·0 116·4 50·9		1·40 ·90 ·40	35·1 10·1 33·6	65·4 ·5 10·3	14·7 - -8 -	28·1 12·3		35·5 22·8 10·2 —
'I'otal vegetable food	977.86	48.8	7.6	404.3	1928.4	2.70	78.8	76.2	15:5	97.7	79.9	68.5
Total food	1241.91	64.0	48.8	413.8	2412.8	3.94	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	7.48		_	-	_	25	-	_	_	_		_

#### No. XXV.

		Wиюн	Ts.					Peroen	TAGES OF	7 TOTAL	Foob.	
KIND OF FOOD	Food	N	utrients.		Energy Value	Cost in		N	utrients	1	Energy	
Material.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grains.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- lıy- drates.	Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese Milk Condensed milk	$ \begin{array}{r} 166.98 \\ 19.77 \\  \hline  \\ 5.49 \\ 24.42 \\ 4.15 \\ 124.61 \\ 15.61 \end{array} $	33·4 4·4 — 0·6 0·2 1·1 4·1 1·7	36·1 5·1 — · 0·5 20·7 1·5 4·9	4·7 		1:81 -45 - - -09 -29 -08 -32 -20	P. et. 15·2 1·8 — ·5 2·2 ·4 11·3 1·4	P. et. 40·3 5·3 — ·7 ·3 1·3 5·0 2·1	P. ct. 48·1 6·9 —	P. ct.  1·5  1·9 2·1	P. ct.	P. ct. 36·7 9·1 — 1·8 5·9 1·6 6·5 4·1
Total animal food	361.03	45.5	68.8	17.8	899:4	3.24	32.8	55.0	91.8	5.5	38.3	65.7
Cereals Sugars and	325.16	31.9	5.9	176.8		.97	29.4	38.7	7.8	55.1		19·7 8·5
starches Vegetables Fruits	85·23 333·63 —	$\begin{bmatrix} -5.2 \\ - \end{bmatrix}$	0.3	85·2 40·9 —		·42 ·30	7·7 30·1 —	6.3	 	12.8		6.1
Total vegetable food	744.02	37.1	6.2	302.9	1451.6	1.69	67.2	45.0	8.2	94.5	61.7	34.3
Total food	1105.05	82.6	75.0	320.7	2351.0	4.93	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condi ments, &c	27.41		_	_	_	.38	_		—	_	_	_
				N	o. XX	VI.			1		1	
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	9.65	$\begin{vmatrix} 1.0 \\ - \end{vmatrix}$	$ \begin{array}{ c c c } \hline 32.3 \\ 5.9 \\ \hline 0.1 \end{array} $			2·25 ·12  ·31	$\begin{vmatrix} & \cdot 6 \\ - & 2 \cdot 0 \end{vmatrix}$	$\frac{\cdot 9}{5 \cdot 0}$	38.5 7.0 —			31·3 1·7 — 4·3
Fish Eggs Butter Cheese	4·25 36·86	$\begin{array}{c c} 0.5 \\ 0.3 \end{array}$	0·3 31·3 1·7	_		·08 ·85 ·10	2.2	.3	$\begin{array}{c c} \cdot 3 \\ 37 \cdot 3 \\ 2 \cdot 0 \end{array}$			1·1 12·0 1·4
Milk (sweet and skim) Buttermilk	$\frac{1229 \cdot 11}{11.06}$		4.2	11:5		·49 ·02			5.0	2.5		6.8
Total animal food	-01.60	2 50.4	75.8	12.7	963.6	4.22	30.0	_	90.2	-	-	55.8
Cereals Sugars and starches Vegetables Fruits	. 89·30 . 585·43	$\begin{bmatrix} 6 \end{bmatrix} - \begin{bmatrix} 1 \end{bmatrix}$	_	89:	3	1.68	5 5.4		8.8	19 2		6·2 12·1 —
Total vegetabl		8 61.6	8:	2 451	6 2180		_	_	-			41.2
Total food	. 1669.0	112.0	84.0	464	3 3144 (	7.1	9 100 (	0 100.0	100.0	100.0	100.0	1000
Beverages, cond monts, &c	i- 12·1	6 -	<u></u>	1-	-	.4	4 -		-	-	_	

## No. XXVII.

		Weig	HTS.					Perce	NTAGES	OF TOTAL	Food.	
Kind of Food	Food		Nutrient	s.	Energy Value	Cost	Trans		Nutrient	S.	Energy	
Material.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Soup Fish Eggs Butter Cheese Milk Condensed milk Buttermilk	200·49 9·52 95·29 28·58 6·30 64·22 4·76 214·41 4·76 11·91	40·2 2·1 1·0 2·4 0·7 0·6 1·3 7·0 0·5 0·3	36·3 2·4 — 0·5 54·5 1·7 8·5 —	3·4 - 7·4 - 0·1 10·7 2·0 0·5		2·38 ·20 ·12 ·25 ·12 ·87 ·10 ·54 ·08 ·02	P. et. 9.7 .5 4.6 1.4 .3 3.1 .2 10.3 .2 .6	P. ct. 31·2 1·6 ·8 1·9 ·5 1·0 5·4 ·4	P. et. 29·8 2·0 — ·4 44·6 1·4 6·9 —	P. ct6 -1·4	P. ct.	P. et. 29·0 2·4 1·5 3·0 1·5 10·6 1·2 6·6 1·0 ·2
Total animal food	640.24	56.1	103.9	24.1	1295·1	4.68	30.9	43.5	85.1	4.5	33.6	57.0
Cereals Sugars and	592.53	59.4	17:3	305.2		1.92	28.5	46.0	14.1	57·1		23 · 4
starches Vegetables Fruits	117·97 703·08 21·53	13·4 0·1	<u>1</u> ·0	117·9 85·9 1·8		·60 ·93 ·08	5·7 33·9 1·0	10·4 ·1	-8	22·0 16·1 ·3		7:3 11:3 1:0
Total vegetable food	1435.11	72.9	18:3	510.8	2563.3	3.23	69.1	56.5	14.9	95.5	66.4	43.0
Total food	2075:35	129:0	122.2	534.9	3858.4	8.21	100.0	100.0	100.0	100.0	100.0	100.0
Severages, condiments, &c	41.9	1	-	- ,	_	.71	-	_	_			_
				No.	XXV	III,						
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	92·12 37·30 —	17·3 8·4 —	19·1 9·7	2·0 _		·80 ·30	6·2 2·5	17·9 8·7	28·2 14·3	-5		17:4
Fish Eggs	18.56	3.2		_		·11 —	- 1.3	3.6	_	_		2.4
Butter Cheese Milk (sweet and	25·57 8·75	$\begin{vmatrix} 0.2 \\ 2.4 \end{vmatrix}$	$\begin{array}{c c}21.7\\3.2\end{array}$	0.3		·38 ·18	1.7	$\begin{bmatrix} \cdot 2 \\ 2 \cdot 5 \end{bmatrix}$	32·0 4·7	-1		3.9
skim) Buttermilk	262·70 10·85	8.8 8.8	4.8	13·2 0·5		·51 ·01	17·7 ·7	9·1 ·4	7.1	3·1 ·1		11.1
Total animal food	455.85	40.9	58.5	16:0	777.3	2.29	30.7	42.4	86.3	3.8	28.2	49.9
Ccreals Sugars and	497.73	48.7	8.9	282:4		1:5	33.7	50.5	13.1	66.7		32.7
starches Vegetables Fruits	71·80 453·95 —	- 6·8	0.4	71.8 53.0 —		·36 ·44 —	4·9 30·7 —	7·1		17:0 12:5		7.8
Total vegetable food	1023:48	55.5	9:3	407.2	1983.6	2:30	69.3	57.6	13.7	96.2	71.8	50.1
Total food	1479:33	96.4	67:8	423.2	2760:9	4:59	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condi- ments, &c	8.75	_	-			.30		-	( - )	_		

#### No. XXIX.

		Wrigh	TS.					Percen	TAGES OF	TOTAL	Food.	
KIND OF FOOD MATERIAL.	Food	N	utrients		Energy Value	Cost		N	utrients		Energy	1
MAINTAL.	Material in Grams.		Fat in Grains.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	184:46 7:20	33.8	41·9 1·8	4.5		1·61 ·12	P. ct. 10·0 ·4	P. ct. 23.9 1.1	P. ct. 47:0 2:0	P. et.	P. ct.	P. ct. 24:3 1:8
Fish Eggs Butter Cheese Milk (skim)	$\begin{array}{c} 75.60 \\ 15.87 \\ 25.20 \\ 11.66 \\ 252.0 \end{array}$	6·3 1·8 0·2 3·2 8·5	$ \begin{array}{c} 0.1 \\ 1.4 \\ 21.4 \\ 4.2 \\ 0.7 \end{array} $	- - 0·4 12·8		·30 ·24 ·44 ·21 ·46	4·1 ·9 1·4 ·6 13·6	4:5 1:3 :1 2:3 6:0	$\begin{array}{c} \cdot 1 \\ 1 \cdot 6 \\ 24 \cdot 0 \\ 4 \cdot 7 \\ \cdot 8 \end{array}$	$-\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $		4·5 3·6 6·6 3·2 6·9
Total animal food	571.99	55.4	71.5	17.7	964.7	3.38	31.0	39.2	80.2	3.1	25:3	50.9
Cereals	710:49	71.6	16.7	388.6		2:12	38.5	50.6	18.8	66.1		32.0
Sugars and starches Vegetables Fruits	112:60 451:0 —	14·5 —		112.6 69.3 —		·57 ·56 —	6·1 24·4 —	10.2	1.0	19·1 11·7 —		8·6 8·5
Total vegetable food	1274.09	86.1	17.6	570.5	2855.7	3.25	69.0	60.8	19.8	96.9	74.7	49.1
Total food	1846:08	141.5	89.1	588.2	3820.4	6.63	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	12.81			-		•44		_		_	_	_
	'			N	o. XX	<b>X.</b>		1		1	1	
Beef, veal, mutton, &c. Pork, lard, &c.	121·25 16·57	22.8	25·0 10·1	1.5		1:0 :21	8·3 1·1	21·0 1·8	35·0 14·1 —	-3 -		19·4 4·1 —
Poultry Fish Eggs Butter Cheese	10·81 16·46		1·0 14·0			 -21 -22 -	- 1·1 -		1·4 19·6			4·1 4·3
Milk (sweet and skim)	218:05	7:3	1.6	11.0		.39	14.9	6.7	2.3	2.2		7.6
Total animal food	0.00.14	33.3	51.7	12.5	668.6	2.03	26.2	30.7	72.4	2:5	21.3	39.5
Cereals	677:67	67.7	19.2	349.8		2.17	46.2		26.9	70.7		42·0 S·5
Sugars and starches Vegetables Fruits	303.01	7.1	0·4 0·1			·44 ·39 ·13		6.5	.6	17:8 7:8 1:2		7·5 2·5
Total vegetable food		4 75.2	19:7	482.0	$\begin{vmatrix} 1 \\ 2467.7 \end{vmatrix}$	3.13	73.8	69.3	27:6	97:5		60.5
Total food		8 108.5	71.4	494.5	3136:3	5.16	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, cond ments, &c			-			.36	-	_	_	-	-	

## No. XXXI.

		WEIG	HTS.					Peror	NTAGES (	ог Тотаг	Food.	
KIND OF FOOD	131	2	Nutrient	s.	Energy Value	Cost			Nutrient	s.	Energy	
Material.	Food Material in Grams,	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c.	146·35 38·80	26·6 8·1	31·2 10·0	2:3		1.28	P. et. 8:5 2:2	P. ct. 20.7 6.3	P. et. 39:4 12:6	P. ct.	P. et.	P. et. 20:3 10:2
Poultry          Fish          Eggs          Butter          Cheese          Milk	93·20 25·39 17·71 1·06 177·18	13·1 3·0 0·1 0·2 5·8	0·2 2·3 15·1 0·3 7·0	- - 8·8		·52 ·40 ·25 ·03 ·42	5·4 1·5 1·0 ·1 10·3	10·2 2·4 ·1 ·2 4·5	3 2·9 19·1 ·4 8·9	- - 1.9		8·3 6·3 4·0 ·5 6·7
Total animal food	499.69	56.9	66.1	11.1	893.5	3.24	29.0	41.4	83 6	2.4	28.7	56.3
Pereals Sugars and	582.59	57:1	12.2	316.1		1.88	33.8	44.5	15.4	69.9		29.9
starches Vegetables Fruits	45·36 575·15 22·14	14·3 —	- 0·8	44.6 78.2 2.3		·24 ·60 ·03	2.6 33.3 1.3	11·1 —	1·0 —	9·9 17·3 ·5		3·8 9·5 ·5
Total vegetable food	1225.24	71.4	13.0	441.2	2222.6	2.75	71.0	55.6	16.4	97.6	71.3	43.7
Total food	1724:93	128:3	79.1	452.3	3116.1	6.29	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	7 26	-	_		- 8	.29						
				No	. XXX	XII.						
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	88·76 13·31	17·4 2·0	15·3 6·6	1:3		1·23 ·25	7·4 1·1	17 4 2·0	27·2 11·8	-3		23·3 4·7
Fish Eggs Butter Cheese Milk (condensed)	17·75 8·80 19·17 17·75 13·31	2·9 1·0 0·1 4·9 1·5	0·8 16·2 6·5	- 0.7 5.8		·09 ·17 ·50 ·35 ·04	1·5 ·7 1·6 1·5 1·1	2·9 1·0 ·1 5·0 1·5	1:4 28:8 11:6	- - 1.2		$ \begin{array}{c c} \hline 1.7 \\ 3.2 \\ 9.5 \\ 6.7 \\ .8 \end{array} $
Total animal food	178.85	29.8	45.4	7.8	576:4	2.63	14.9	29.9	80.8	1.6	19.5	49.9
Cereals Sugars and	694.60	64.2	10:4	364.1		1.82	58.1	64.3	18 5	74.0		34.2
starches Vegetables Fruits	88·23 233·54 —	0·1 5·7	0.4	84·5 35·6 —		·49 ·33 —	7·4 19·6 	5·7	<sub>.7</sub>	17·2 7·2 —		9·3 6·3
Total vegetable food	1016:37	70.0	10.8	484.2	2372.6	2 64	85.1	70.1	19.2	98:4	80.5	50.1
Total food	1195 22	99.8	56.2	492.0	2949:0	5 27	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	8:47			- 1	_	.33			-			

## No. XXXIII.

		WEIG	RTS.					Perce	NTAGES C	F TOTAL	Food.	
KIND OF FOOD	Food	1	Nutrients	8.	Energy Value	Cost		1	Nutrient	3.		
	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Bcef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter	75.93 5 06 	14.7 1.1 - 8.5 - 0.3	$ \begin{array}{c c} 16.7 \\ 1.3 \\ \hline 0.2 \\ \hline 29.2 \end{array} $			1·15 ·09 — ·55 — 1·07	P. ct. 4:5 -3 - 5:9 - 2:0	P. ct. 15.1 1.1 - 8.7 - 3	P. ct. 24·2 1·9 - 3 - 42·2	P. et.	P. et.	P. ct. 17·2 1·4 
Cheese Milk	20.25 151.87	5·6 5·0	$\begin{bmatrix} 7.4 \\ 6.0 \\ \end{bmatrix}$	0·8 7·5		·34 ·40	1·2 8·9	5·7 5·1	10·7 8·7	1.2		5·1 6·0
Total animal food	388.78	35.2	60.8	8.3	743.8	3.60	22.8	36.0	88.0	1.6	23.7	54.0
Cereals Sugars and	533.99	49.2	7'6	283.6		1.67	31.3	50.3	11.0	55.6		25.0
starches Vegetables Fruits	123·93 656·90 —	13.4	<u>0</u> .7	123·9 94·4 —		·63 ·77 —	7·3 38·6 —	13·7 —	1.0	24·3 18·5 —		9.4
Total vegetable food	1314.82	62.6	8.3	501.9	2391.6	3.07	77.2	64.0	12.0	98.4	76:3	46.0
Total food	1703.6	97.8	69.1	510.2	3135.4	6.67	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	19:33	-	-	_	_	•77	- (	_	_		_	_
				No.	XXX	IV.			1	1		
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs	158·23 46·15 — 39·55 5·81 16·35	27·9 6·2 - 6·6 0·6 0·1	38.6 21.2 — 0.1 0.5 13.8	5·6 — — —		2·20 ·83 - ·28 ·11 ·43	8·3 2·4 — 2·1 ·3 ·85	22·1 4·9 - 5 3 ·5 ·1	41:3 22:7 - :1 :5 14:8			26·5 10·0 — 3·4 1·3 5·2
Butter Cheese Milk	$\frac{10}{230} \frac{35}{75}$	$\frac{3}{7.6}$	$\frac{1}{9\cdot 2}$	11.2		.63	12.1	6.0	9.8	1.9		7.6
Total animal food	496.84	49.0	83.4	17:1	1046.6	4.48	26.0	38.9	89.2	2.8	27:4	54.0
Cercals Sugars and starches	651·12 145·04	60.8	9.2	347·6 136·8		2·05	34·2 7·6	48.2	9.8	58·5 23·1		24.7
Vegetables Fruits	613:41	16.0		92.7		-86 	32·2 —	12·7 —	1·0 —	15 6 — —		10:3
Total vegetable food	1409 57	77.1	10.1	577.1	2776:1	3.82	74.0	61.1	10.8	97.2	72.6	46.0
Total food	1906:41	126:1	93.5	594.2	3822.7	8:30	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	13.18	_	_	_	_	•46		_	-	_	_	_

## No. XXXV.

						<del></del>							
İ			WBI	GHTS.					Pero	ENTAGES	ог Тота	L Food.	
	KIND OF FOOD MATERIAL	Food		Nutrien	ts.	Energy Value in	Cost	Food		Nutrien	ts.	- Energ	v
		Material in Grams.	Protein Grams	Grome		Calories.	Pence	Ma- terial.	Protein	Fat.	Carbo hy- drates.	Value in Calories	Cost.
-	Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish	$\frac{7.90}{37.61}$	$\frac{1.7}{3.1}$	18·7 2·0 —	0.6		1:54 :20 - :40	-5	$\begin{array}{ c c }\hline 1.6\\ \hline 2.9\end{array}$	P. ct. 20·2 2·2 —		P. ct.	P. ct. 18·9 2·5 — 4·9
	Eggs Butter Cheese Milk Buttermilk	44.41	3·3 0·4 2·1 9·1 0·2	2:5 37:7 2:9 11:0	0·3 13·8 0·4		1:34 :16 :76 :01	$ \begin{array}{c c} 1.8 \\ 2.9 \\ .5 \\ 17.8 \\ .6 \end{array} $	3·1 ·4 1·9 8·5 ·2	2·7 40·6 3·1 11·9	- 2·9 ·1		7·9 16·5 2·0 9·4
	Total animal food	505.86	38.0	74.8	15.1	913:3	5.05	32.5	35.5	80.7	3.2	28.2	62.2
	Cereals Sugars and	575.93	59.6	17:3	305.6		1.98	37.2	55.5	18.6	64.6		24.4
7	starches Vegetables Truits	102·57 368·56	9.6	0.7	102·5 49·8 —		·52 ·57 —	6·6 23·7 —	9.0	<sub>7</sub>	21·7 10·5		$\begin{bmatrix} 6.4 \\ 7.0 \\ - \end{bmatrix}$
	Total vegetable food	1047.06	69.2	18.0	457.9	2328.5	3 07	67.5	64.5	19.3	96.8	71.8	37.8
	Total food	1552.92	107.2	92.8	473.0	3241.8	8.12	100.0	100.0	100.0	100.0	100.0	100.0
В	Severages, condiments, &c	8.85					•31	_	_		_	_	_
					No.	XXX	VI.						
P	eef, veal, mutton, &c. ork, lard, &c. oultry	169·14	31.0	36.8	3.9		1.92	8.8	23.0	30·5 —	7		25.8
F	ish lggs	78·92 —	13.1	0.2			-43 -	- 4·1	9.7		_		5.8
	utter heese lilk uttermilk	58·15 12·46 249·23 20·76	0.5 3.4 8.2 0.6	49·4 4·5 9 9 0·1	$ \begin{array}{c c}  - & \\ 0.5 \\ 12.4 \\ 0.9 \end{array} $		·76 ·24 ·65 ·03	$ \begin{array}{c} 3.0 \\ .6 \\ 13.0 \\ 1.1 \end{array} $	·4 2·5 6·1 ·4	$ \begin{array}{c} 41.0 \\ 3.7 \\ 8.2 \\ \cdot 1 \end{array} $	$\begin{bmatrix} - \\ 2 \cdot 1 \\ 2 \cdot 1 \\ \cdot 1 \end{bmatrix}$		10·2 3·2 8·7 ·4
	Total animal food	588.66	56 8	100.9	17.7	1243·S	4:03	30.6	42.1	83.7	3.0	30 4	54·1
	ercals	705.98	70.3	19.2	366.4		2.27	36.7	52.2	15.9	62.1		30.2
$ _{V}$	starches egctables ruits	144·38 485·16 —	$\begin{bmatrix} -7 \\ -7 \end{bmatrix}$	$\begin{bmatrix} -0.5 \end{bmatrix}$	144·3 61·2 —		·65 ·50 —	7:5 25:2 —	<u>-</u> 5·7	_ 	24·5 10·4 —		8·7 6·7
-	Fotal vegetable food	1335.52	78.0	19:7	571.9	2847.8	3:42	69:4	57.9	16:3	97:0	69.6	45.9
r	Total food	1924.18	134.8	120.6	589.6	4091.6	7:45	100.0	100.0	100.0	100.0	100.0	100.0
В	everages, condiments, &c	20.27	-		-	_	•59						

## No. XXXVII.

		Whig	птв.					Perce	NTAGES (	OF TOTAL	Food.	
Kind of Food Material.	Food	1	Nutrient	8.	Energy Value	Cost		:	Nutrient	6.		
	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish	68:53 46:85 — 74:76	13·7 8·4 — 12·0	15·1 19·0 — 0·2	0.8		1·04 ·82 —	P. ct. 6·0 4·1 —	P. ct. 17.6 10.8 — 15.4	P. ct. 18·4 23·1 —	P. ct. 3	P. ct.	P. ct. 17·5 13·8 — 10·1
Eggs Butter Cheese Milk	$ \begin{array}{r} 16.48 \\ 37.38 \\ - \\ 124.61 \end{array} $	$\begin{array}{c c} 1.9 \\ 0.3 \\ \hline -4.0 \end{array}$	$ \begin{array}{c} 1.5 \\ 31.7 \\ - \\ 4.9 \end{array} $	$\begin{bmatrix} - \\ - \\ 6.2 \end{bmatrix}$		·27 ·87 — ·38	1·4 3·3 — 10·9	$\begin{bmatrix} 2.5 \\ .4 \\ -5.1 \end{bmatrix}$	1.8 38.6 —	$\begin{bmatrix} - \\ - \\ 2\cdot 4 \end{bmatrix}$		4·6 14·7
Black pudding	12.46	0.4	2.0	0.5		-11	1.1	.5	2.4	2.4		1.9
Total animal food	381.07	40.7	74.4	7.5	889.5	4.09	33.4	52.3	90.6	2.9	41.7	69.0
Cereals Sugars and	289.60	27.7	7.2	146.9		1.02	25.4	35.7	8.8	57.3		17.2
starches Vegetables Fruits	45·1 425·43 —			45·1 57·0 —		·38 ·44 —	3·9 37·3 —	12·0 —	$\begin{bmatrix} - \\ - \end{bmatrix}$	17.6 22.2 —		6·4 7·4 —
Total vegetable food	760.13	37.0	7.7	249.0	1244.2	1.84	66.6	47.7	9.4	97.1	58.3	31.0
Total food	1141:20	77.7	82.1	256.5	2133.7	5.93	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condi- ments, &c	10.9	-	-	_	_	٠4		_	_	_	_	_
				No.	XXX	/III.				,		
Beef, veal, nutton, &c. Pork, lard, &c. Poultry	121.5 49.06 —	23·4 5·8 —	18·9 29·4 —	2·8 —		1·38 ·87	8·4 3·4	22·9 5·7 —	22·9 34·6			18:4 11:6
Fish  Eggs  Butter  Cheese  Milk	52:07 12:75 14:34 11:57 231:42	7·1 1·5 0·1 3·2 7·6	0.1 $1.1$ $12.1$ $4.2$ $9.2$	- - 0.4 11.5		·41 ·25 ·48 ·21 ·66	3.6 .9 1.0 .8 16.0	6·9 1·5 ·1 3·1 7·5	1·3 14·2 5·0 10·8	- - - 2·9		5.5 3.3 6.4 2.8 8.8
Total animal food	492.71	48.7	75:0	14.7	957:4	4.26	34.1	47.7	88:3	3.7	33.6	56.8
Cereals Sugars and	387.64	39.4	9.2	219.4		1.39	26.8	38.6	10.8	54.7		18.5
starches Vegetables Fruits	92·57 461·46 11·57	0·1 13·7 0·2		88·9 71·0 7·1		1·13 ·20	6·4 31·9 ·8	13·4 ·2		22·1 17·7 1·8		6·9 15·1 2·7
Total vegetable food	953.24	53.4	10.0	386.4	1896:2	3.24	65.9	52.3	11.7	96.3	66.4	43.2
Total food	1445.95	102·1	85.0	401.1	2853.6	7:50	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	75.21	_		_	_	1.18	-	_	- 4	_	-	-

#### No. XXXIX.

		WEIG	HTS.		:			Peroe	NTAGES O	F TOTAL	Food.	
KIND OF FOOD		1	Nutrient	s.	Energy Value	Cost in		1	Nutrients	S.	Energy	
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c.	46·06 49·11	8·4 10·9	11·2 13·3			·48 ·84	P. ct. 2·8 2·9	P. ct. 7 · 6 9 · 7	P. ct. 14·4 17·1	P. ct.	P. ct.	P. ct. 7·9 13·8
Poultry	12·42 15·50 33·63 2·93	1.0 1.8 0.3 0.8	$-\frac{1\cdot 4}{28\cdot 5}$ $1\ 0$	_ _ _ _ _		$08 \\ 28 \\ 74 \\ 05$	·7 ·9 2·0 ·2	1·6 ·3 ·7	1·8 36·6 1·3			1·3 4·6 12·3 ·8
Milk (swect and skim) Condensed milk	249·07 7·38	8.3	5.0	12.5		·51 ·07	14·9 ·4	7.5	6.4	2:3		8.4
Total animal food	416.10	32.3	60.4	15.8	758.9	3.05	24 8	29.0	77.6	2.9	22.1	50.3
Cereals Sugars and	743·10	72.4	17:1	384.6		2.03	44.3	65.1	21 9	70.3		33.4
starches Vegetables Fruits	94·47 424·18 —	6·5 —		94·4 52·1 —		·51 ·48 —	5·6 25·3 —	5·9 —		17·3 9·5 —		8·4 7·9 —
Total vegetable food	1261 .75	78.9	17.5	531.1	2663.7	3.02	75.2	71.0	22.4	97.1	77.9	49.7
Total food	1677:85	111.2	77:9	546.9	3422.6	6.07	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	10.19			-		.47			_		-	
				1	No. XI	Ĺ.						
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	161·52 23·70	30.1	36·6 8·7	6.7		1.75	10·7 1·5	27·3 2·7	43·8 10·4	1.4		25·2 5·6
Fish Eggs Butter Cheese Milk,	25·76 5·22 10·43 3·95 335·85	2·1 0·6. 0·1 1·0 11·0	0:4 8:8 1:4 13:4	- 0·1 16·7		·24 ·10 ·30 ·07 ·88	1.6 .3 .6 .2 21.3	1·9 ·5 ·1 1·0 10·0	10·5 1·7 16·0	3:4		3·4 1·4 4·3 1·0 12·8
Buttermilk,  Total animal food	9·87 	48.1	69:3	23.9	939.7	3.74	36.8	43.7	82.9	4.9	29.2	53.8
Cereals Sugars and	576.24	57.3	14.0	302·1		2:01	36.6	51.9	16.7	62.4		29.0
vegetables Fruits	125·49 283·53 8·85	0·2 4·7	0.3	119·3 37·8 1·2		·80 ·32 ·07	8:0 18:0 :6	4·2 —	4 	24·6 7·8 ·3		11.5 4.7 1.0
Total vegetable food	994.11	62.2	14:3	460.4	2275.6	3 '20	63.2	56.3	17·1	95.1	70.8	46.2
Total food	1573.20	110:3	83.6	484.3	3215:3	6.94	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	24.18	_	-	-	- 1	•65	-	_	1-1		-	_

## No. XLI.

		WEIOI	lts.					Peroe	NTAGES C	F TOTAL	Food.	
KIND OF FOOD MATERIAL.	Food	1	Nutrients	3.	Energy Value	Cost		1	Vutrients	S.		
AIATERIAL.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calorics.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	135·97 106·42	26·3 15·0	23·9 25·9	3.3		·94 ·80	P. ct. 9.7 7.6	P. ct. 23·3 13·3	P. ct. 29:9 32:4	P. et. -9	P. ct.	P. ct. 17.6 15.0
Fish Eggs Cheese Milk Buttermilk Condensed milk	54·91 13·31 23·39 5·49 6·86 27·45 13·72	9·1 1·5 0·2 1·5 0·2 0·8 1·5	0·1 1·2 19·8 2·0 0·2 0·1	$\begin{array}{c} - \\ - \\ 0.2 \\ 0.3 \\ 1.3 \\ 5.9 \end{array}$		36 24 43 09 02 04 08	3·9 ·9 1·7 ·4 ·5 1·9 1·0	8·1 1·3 ·2 1·3 ·2 ·8 1·3	11 1.5 24.8 2.6 .2 .1	- - - 1 13 1.6		6·7 4·5 8·0 1·7 ·4 ·7 ·5
Total animal food	387.52	56.1	73.2	11.0	955.9	3.0	27.6	49.8	91.6	3.0	35.1	56.1
Cereals Sugars and	437.12	42.0	5.9	247:3		1.43	31.2	37.2	7.4	66.8		26.7
starches Vegetables Fruits	34·26 543·88 —	14·7	- 0.8 -	34·2 77·6 —		18 74 —	2·4 38·8 —	13.0	<u></u>	9·2 21·0 —		3·4 13·8 —
Total vegetable food	1015.26	56.7	6.7	359.1	1767:1	2:35	72.4	50.2	8.4	97:0	64.9	43.9
Total food	1402.78	112.8	79.9	370.1	2723:0	5.35	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	9.88	-	_		<del>-</del>	22			_	-	_	
				N	o. XL	II.			,			
Beef, veal, mutton, &c. Pork, lard, &c.	167.48	32.6	31.4	1.8		·66 —	11·8 —	33.0	35·6 —	.5		11.1
Poultry Fish	27.68	4.6	_			-86	2.0	4.6	_	_		14.2
Eggs Butter Cheese	37.68	0.3	32.0			·25 —	2.7	-3	36.3	_		4.2
Milk	319.84	10.5	12.7	15.9		2.04	22.6	10.6	14.4	$\frac{4\cdot 2}{}$		34.4
Total animal food	552.68	48.0	76.1	17.7	977:1	3.81	39.1	48.5	86.3	4.7	35.3	64.2
Cereals Sugars and	440.34	44.4	11.6	231.8		1.35	31·1	44.9	13.2	61.4		22·8 6·9
starches Vegetables Fruits	84·20 337·29 —	6.5	0·4 —	84·2 43·7 —		·41 ·36 —	23.8	6.6	- - -	11.6		6.1
Total vegetable food	861.83	50.9	12:0	359.7	1795·1	2.12	60.9	51.5	13.7	95:3	64.7	35.8
Total food	1414.51	98.9	88.1	377.4	2772.2	5.93	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condi- ments, &c	13.49	_	_			•46	_	_	_	_	-	

## No. XLIII.

		WEIG	HTS.					Perc	DENTAGES	ог Тота	L Food.	
Kind of Food	Food		Nutrien	ts.	Energy Value	Cost	[ m ,		Nutrie	ıts.	Energy	7
Material.	Materia in Grams.	Proteir	Fat in		S	Pence	Food Ma- terial.	Protein	r. Fat.	Carbo hy- drates	Value in Calories.	Cost.
	52.82	11.9	23·4 13·8			1:47			29.4	.2	P. ct.	P. ct. 19:5 10:9
Eggs Butter	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.9	$ \begin{vmatrix} 0.1 \\ 0.7 \\ 16.5 \\ - \end{vmatrix} $			·42 ·17 ·64	5		$\cdot   \cdot \hat{g}$			5.6 2.3 8.5
skim)	400.00	14.1	10.3	21.3		.96	26.9	11.7	12.9	5.0		12.7
Total anima food	200.00	58.9	64.8	22 3	935.5	4.48	43.6	49.0	81.3	5.2	30.3	59.5
Cereals Sugars and	. 476.41	48.5	14.2	246.9		1.77	30.3	40.3	17.8	57.6		23.5
starches Vcgetables Fruits	. 297.93		0.7	108·6 50·4		-60 -69	7·2 18·9	10.6		25·4 11·8		9·1 7·9
Total vegetable food	00=00	61.3	14.9	405.9	2154·1	3.06	56.4	51.0	18.7	94.8	69.7	40.5
Total food	. 1573.06	120.2	79.7	428.2	3089.6	7.54	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, cond ments, &c		_	M - 3	*****		•56	_		_			
				N	o. XL	IV.						
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	48.60	19.6	18·8 12·2	1:3		1.29	5·4 2·8	13·3 5·9	17·4 11·3			14:0
Fish Eggs Sutter Cheese Milk	21.60 36.90 48.60 2.70	$ \begin{array}{c c} 5.1 \\ 4.3 \\ 0.4 \\ 0.7 \\ 6.6 \end{array} $	0·7 3·4 41·3 0·9 8·1	- - 0.1 10.1		10 ·84 1·4 ·04	1·2 2·1 2·8 ·2	3·5 2·9 ·3	-6 3·2 38·4 -8			1·1 9·1 15·1 ·4
Buttermilk	81.0	2.4	0.4	3.8		·42 ·07	11.7	4·5 1·6	7·5 ·4	1.5 .5		4.5
Total animal food	700 10	47.8	85.8	15:3	1056.6	4.95	30.8	32.5	79.6	2.0	24.8	53.5
Cercals Sugars and		90.7	21.6	488.9		3.27	51.5	61.6	20.0	76.0		35.4
starches Vegetables Fruits	201.20	0.1 8.5 —	0.4	104·6 37·5 —		·62 ·41 —	6·2 11·5	5·8 —	 4 	14·2 5·8 —		6.7
Total vegetable food	1208:30	99:3	22.0	631.0	3198.8	4:30	69.2	67.5	20.4	98.0	75.2	46:5
Total food	1744.70	147.1	107.8	642:9	4255.4	9.25	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	8:1	-		_		•42	Character Services					

## No. XLV.

		WEIOH	TS.					Peroen	TAOES OF	Total :	Food.	
Kind of Food	Tood	N	utrients.		Energy Value	Cost in		N	utrients.			
Material.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese	83·18 — 61·29 23·16 45·88 6·65	18·0 - 5·1 2·0 0·4 1·8	16·8 - 0·1 2·0 39·0 2·4			1·30 - ·69 ·61 1·62 ·14	P. ct. 5·8 - 4·3 1·6 3·2 ·5	P. ct. 20·3 — 5·8 2·3 ·5 2·0	P. ct. 22·2	P. et	P. ct.	P. ct. 16·5 — 8·8 7·7 20·6 1·8
Milk Buttermilk	153·24 43·78	5.0	6.1	$\begin{array}{c} 7.\overline{6} \\ 2.1 \\\end{array}$		.05	10·7 3·0	5·6 1·5	8:0	1·7 ·5		5.6
Total animal food	417.18	33.6	66.6	9.9	797.7	4.85	29.1	38.0	87.5	2.2	27.2	61.6
Cereals Sugars and starches	431:35	47·7 0·1	8.9	286·4 102·3		1.53	30.0	53.9	11.7	$\begin{array}{c c} 63.0 \\ 22.5 \\ 11.0 \end{array}$		19·4 8·2 7·5
Vegetables Fruits	420·32 61·29		$\begin{bmatrix} 0.2 \\ 0.1 \\ \end{bmatrix}$	50·0 6·0		·59 ·26	29.3	7.8	•1	1:3		3.3
Total vegetable food	1018.04	_	9.5	444.7	2136.7	-	·		12.5	97.8	$\frac{72.8}{100.0}$	38.4
Total food Beverages, condi	1435.22	88.5	76.1	454.6								
ments, &e:	9.8		-	-1		•44	1	1-				
				N	o. XL	VI.			1	1	1	
Beef, veal, mutton, &c. Pork, lard, &c. Black pudding Fish Eggs Butter Cheese Milk Condensed milk	$egin{array}{c} 26.44 \\ 13.22 \\ 52.89 \\ 43.73 \\ 23.14 \\ 14.0 \\ 165.3 \end{array}$	4     3.0       2     0.4       9     6.6       3     5.2       4     0.2       1     3.8       0     5.4	19·9 16·3 2·1 0·1 4·0 19·6 5·1 6·6	0.5		1:32 :37 :11 :37 :90 :52 :24 :35 :06	1 2 2 3 2 3 4 3 5 5 9 9 9	$egin{array}{c ccccccccccccccccccccccccccccccccccc$	23·7 19·5 2·5 ·1 4·8 23·3 6·1 7·8	- -1 - -1 2·0 1·1		19·3 5·4 1·6 5·4 13·2 7·6 3·5 5·1
Total anima food	4.40.5	4 44.8	73.7	13:5	924.4	4 4.24		_	-	3.3	_	62.0
Cereals Sugars and starches Vegetables	. 494.9	5 0.1	9.6	92.5	$2 \Big $	1.64	4 26.	9 $1$	11·4 - ·8 -	23.0		24·0 7·9 6·1
Total vegetabl		59 51.8	5 10:	387	2 1897		-		_			
	1837	96.6	5 84.0	0 400	7 2821	6.8	4 100	0 100.0	100.0	100.0	100.0	1000
Beverages, cond ments, &c.	li- 51 ·0	04 -		_		.2	9 -		_	-	-	-

## No. XLVII.

-			Weig	IITS.					Pero	INTAGES	OF TOTAL	Food.	
	Kind of Food	Food		Nutrien	ts.	Energy Value	Cost	77		Nutrient	ts.	Energy	
	Material.	Material in Grams.	Protein in Grams.	Fat in Grams		in Calories.	Pence.	Food Ma- terial.	Protein	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
P P F E B O M	deef, veal, mutton, &c. dork, lard, &c. doultry dish dish dish dish dish dish dish dish	86.95 11.78 — 23.56 6.49 40.17 5.89 206.18 44.18	16·0 2·6 — 1·9 0·7 0·4 1·6 6·8 1·3	$ \begin{array}{c c} 19.5 \\ 3.0 \\ - \\ 0.6 \\ 34.1 \\ 2.1 \\ 8.2 \\ 0.2 \end{array} $	2·0 - - - - 0·2 10·3 2·1		1·25 ·28 — ·16 ·15 1·36 ·12 ·57 ·07	P. ct. 6 · 1 · 8 1 · 7 · 5 2 · 8 · 4 14 · 5 3 · 1	P. ct. 18·2 3·0 — 2·2 1·8 7·7 1·5	P. ct. 25 · 3 3 · 9 —	P. ct4 2 2 - 5	P. ct.	P. ct. 17.6 3.9  2.2 2.1 19.1 1.7 8.0 1.0
	Total animal food	425 20	31.3	67.7	14.6	817.8	3.96	29.9	35.6	87.7	3.1	27.6	55.6
	ereals ugars and	444.76	49.3	9.1	259 4		1.66	31.2	56.1	11.8	55.6		23.3
V	starches egetables ruits	139·85 414·60 —	0·1 7·2 —	<u>0</u> ·4	136·1 57·2		·82 ·68	9·8 29·1 —	8·2 —	- -5	29·1 12·2 —		11.5 9.6 —
	Total vegetable food	999:21	56.6	9.5	452.7	2140·4	3.16	70.1	64.4	12.3	96.9	72.4	44.4
	Total food	1424.41	87.9	77.2	467:3	2955:3	7.12	100.0	100.0	100.0	100.0	100.0	100.0
	everages, condi- ments, &c	11.78	_	-	-		.51				-	_	_
					No.	XLV	III.						
Po Po Fi Eg Bu	mutton, &c. ork, lard, &c. oultry sh	77·12 3·95 47·41 10·45 11·85 — 138·29	$ \begin{array}{c c} 14.2 \\ -\\ 3.9 \\ 1.2 \\ 0.1 \\ -\\ 4.5 \end{array} $	16·2 3·8 — — — 10·0 — 5·5	6.9		·88 ·04 ·13 ·20 ·31 —	7·9 ·5 — 4·9 1·1 1·2 — 14·2	19·6 - 5·4 1·6 ·1 - 6·2	37.6 8.8 — — 23.2 — 12.8			$\begin{bmatrix} 22 \cdot 1 \\ 1 \cdot 0 \\ -3 \cdot 3 \\ 5 \cdot 0 \\ 7 \cdot 8 \\ -8 \cdot 6 \end{bmatrix}$
3	Fotal animal food	289.07	23.9	35.5	6 9	456.4	1.90	29.8	32.9	82.4	2.0	21.6	47.8
	ereals	442.53	43.4	7.2	246.8		1.21	45.6	$-\frac{52.5}{59.8}$	16.7	71.5		37.9
$V_{\epsilon}$	starches egetables uits	67 01 171·95	0.1	<u>-0.4</u>	64·2 27·2		·32 ·25 —	6·9 17·7	$\begin{bmatrix} \cdot 1 \\ 7 \cdot 2 \\ - \end{bmatrix}$	_ 	18·6 7·9		8.0
r   	otal vegetable food	681.49	48.7	7.6	338.2	1657.0	2.08	70.2	67:1	17:6	98.0	78.4	52.2
	otal food	970:56	72.6	43.1	345.1	2113.4	3.98	100.0	100.0	100.0	100.0	100.0	100.0
Be	verages, condi- ments, &c	3.95	-	_		_	·13					_	_

## No. XLIX.

		WEIGH	rs.					Percent	TAGES OF	TOTAL	Foop.	
Kind of Food	Food	N	utrients		Energy Value	Cost		N	atrients.	}		
MATERIAL.	Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c.	149·86 21·18	28·7 4·8	33·1 5·5	2.9		1·97 ·43	P. ct. 9·0 1·3	P. ct. 23.6 3.9	P. et. 36.6 6.1	P. ct.	P. et.	P. ct. 25.5 5.6
Poultry Fish Eggs Butter	59·94 13·21 16·18	5·0 1·5 0·1	$ \begin{array}{c c}  & - & \\  & 0.1 \\  & 1.2 \\  & 13.7 \\  & - \\ \end{array} $			·34 ·26 ·41	3·6 ·8 1·0	4·1 1·2 ·1	1:3 15:2			4·4 3·4 5·3
Cheese Milk	249.77	8.2	10.0	12.4		.63	14.8	6.7	11.1	2.5		8.2
Total animal food	510.14	48.3	63.6	15.3	852.2	4.04	30.5	39.6	70.4	3.1	25.5	52.4
Cereals Sugars and	657 · 22	67.0	26:3	307:3		2.72	39.4	55.1	29.1	63.0		35.3
starches Vegetables Fruits	114·89 387·25 —	$\begin{vmatrix} -6.4 \\ - \end{vmatrix}$		114·8 50·8 —		.56 .39 —	6·9 23·2 —	5:3		23·5 10·4 —		7·3 5·0
Total vegetable food	1159:36	73.4	26.8	472.9	2489·1	3.67	69.5	60.4	29.6	96.9	74.5	47.6
Total food	1669.50	121.7	90.4	488.3	3341.3	7.71	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	28.17			_		.54	_	_		_		
					No. I	4.		1		1	ı	
Beef, veal, mutton, &c. Pork, lard, &c.	96·69 46·88		20.6			1.73		14·5 8·7	20·0 11·8	_		19·0 11·5
Poultry Fish Eggs Butter	70·32 6·46 45·47	0.7	$ \begin{array}{ c c c } \hline 0.2 \\ 0.6 \\ 38.6 \\ 0.6 \end{array} $	_		·46 ·19 1·32 ·51	2.6	.3	·2 ·6 37·4 8·3	-  -  -		5.0 2.2 14.5 5.6
Cheese Milk Condensed milk	249.07	7 8.2				.07	14.4	6.7	9·7 —	2.5		7.1
Total animal food	~ ~ ~ O . O :	5 57.0	90.7	18.4	1152.6	5.98	31.8	46.7	88.0	-		65.7
Cereals	. 550.1	8 55.9	11.8	302.0		1.89			11.5	61.6		6.2
Sugars and starches Vegetables	. 527.4			94·8 75·4 —		·57 ·68			-5			7.4
Total vegetable food		65.2	2 12.	472.5	2 2318.7	3.1-	68.5	53.3	-		_	34.3
Total food	1504.0	66 122 2	2 103.	1 490.6	3471:	9.1:	2 100.0	0 100.0	100.0	100.0	100.0	100.0
Beverages, cond ments, &c.	i- 22·0	3 -	-		_	•70	6 -	-	_		-	-

## No. LI.

		WEIG	nts.					Perce	NTAGES C	F TOTAL	Food.	
KIND OF FOOD			Nutrient	5.	Energy Value	Cost		1	Nutrient	5.	Energy	
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pencc.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c.	88·50 8·52	19·3 0·9	22·1 5·2			·90 ·18	P. ct. 5·4 ·5	P. ct. 17.5 .8	P. ct. 25·9 6·1	P. et.	P. et.	P. ct. 13·1 2·6
Poultry     Fish       Eggs       Cheese     Milk	71:45 30:07 31:88 10:57 341:05	11.9 3.5 0.3 2.9 11.2	$\begin{array}{c} 0.2 \\ 2.8 \\ 27.1 \\ 3.8 \\ 13.6 \end{array}$	- - 0·4 17·0		·46 ·65 ·78 ·20 ·92	4·4 1·8 2·0 ·7 20·8	10·8 3·2 ·3 2·6 10·2	3·4 31·7 4·4 15·9	- - - 3.9		6·7 9·4 11·3 2·9 13·3
Total animal food	582.04	50.0	74.8	17:4	972.0	4.09	35.6	45.4	87.6	4.0	31.8	<b>5</b> 7·3
Cereals	496.91	50.6	10.0	274.2		1.68	30.3	45.9	11.7	62.2		24:4
Sugars and starches Vegetables Fruits	89·69 468·94 —	0·3 9·3	0.6	85·0 64·1 —		·57 ·55 —	5·5 28·6 —	*3 8·4 —	<sub>7</sub>	19·3 14·5 —		8·3 8 0 —
Total vegetable food	1055:54	60.2	10.6	423.3	2080.9	2.80	64.4	54.6	12:4	96.0	68.2	40.7
Total food	1637:58	110.2	85.4	440.7	3052.9	6.89	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	10.0	_	_		_	•49	-	- 1	-	_	_	_
				N	o. LI	I.			,			
Beef, veal, mutton, &c. Pork, lard, &c.	225·72 46·26	40·0 10·58	34·3 12·1	4.8		2·27 ·79	18·9 3·9	37·0 9·7	39·4 13·9	1.4		32·9 11·5
$egin{array}{cccc} \mathbf{Poultry} & \dots & \dots & \dots \\ \mathbf{Fish} & \dots & \dots & \dots \\ \mathbf{Eggs} & \dots & \dots & \dots \end{array}$	69.84	5·8 —	0.1			-35 -	5.9	5.4		_		5·1
Butter Checse Milk Black pudding	24.84 9.0 90.0 13.5	0·2 2·4 2·9 0·4	$ \begin{array}{c} 21.1 \\ 3.3 \\ 3.6 \\ 2.1 \end{array} $	$0.3 \\ 4.5 \\ 0.5$		·43 ·15 ·27 ·08	2·1 ·8 7·6 1·1	·2 2·2 2·7 ·4	24·2 3·8 4·2 2·4	$-\frac{1}{1:3}$		6.2 $2.2$ $3.9$ $1.2$
Total animal food	479.16	62.2	76.6	10.1	1008.8	4.34	40.3	57.6	88.0	3.0	38.3	63.0
Cereals Sugars and	459.18	43.1	10.3	231.4		1.85	38.5	39.8	11.8	68.6		26.9
starches Vegetables Fruits	73.08 172.80 7.38	2·8 —	$\frac{}{0\cdot 2}$	$\begin{array}{c c} 73.1 \\ 22.3 \\ 0.2 \end{array}$		·40 ·25 ·05	6·1 14·5 ·6	$\frac{}{2\cdot 6}$	<sub>2</sub>	21·7 6·7		5·8 3·6 ·7
Total vegetable food	712:44	45.9	10:5	327.0	1626.5	2.55	59.7	42.4	12.0	97:0	61.7	37.0
Total food	1191.60	108.1	87.1	337:1	2635·3	6.89	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	20:51		_	_		.63	-		_			_

## No. LIII.

		WEIGH	TS.					Percen	TAGES OF	TOTAL	Food.	
KIND OF FOOD MATERIAL.	Food Material in Grams.	Material   Protein		Carbo- hydrates in Grams.	Energy Value in Calories.	Cost in Pence.	Food Ma- terial.	Protein.	utrients.	Carbo- hy- drates.	Energy Value in Calories.	Cost.
Beef, vcal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese	105·0 3·0  73·68  16·44 9·0	20·1 0·6 - 6·1 - 0·1 2·4	23·6 0·7 - 0·1 - 13·9 3·3	2.1		1·48 ·06 — ·47 — ·58 ·19	P. ct. 8·2 ·2 — 5·8 — 1·3 ·7	P. ct. 22·2 ·7 — 6·7 — ·1 2·7	P. ct. 42.7 1.3 - 2 - 25.2 6.0	P. ct.  '5	P. ct.	P. ct. 27:5 1:1 
Milk  Total animal food	364.62	34.5	45.9	10:3	610.5	3.14	28.6	38.1	83.2	2.5	23.9	57:0
Cereals Sugars and starches Vegetables Fruits	513·0 72·0 324·84 —	49·9 - 6·2 -	9·0 - 9·0	283·0 72·0 40·9		1·46 ·39 ·46 —	40·3 5·6 25·5 —	55.1	16·3 — — —	69·7 17·7 10·1 —		26:8 
Total vegetable food	909:84	56.1	9:3	395.9	1939.7	2:31	71.4	61.9	16.8	97.5	76.1	42.
Total food	1274.46	90.6	55.2	406.2	2550.2	5.45	100.0	100.0	100.0	100.0	100.0	100
Beverages, condiments, &c	10.3	-	_		- 1	•37	-	_		_	_	
				N	lo. LI	v.			i			
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese Milk	24·16 30·15 31·22 5·70	$ \begin{array}{c c}  & 5.1 \\  \hline  & 1.6 \\  & 3.5 \\  & 0.3 \\  & 1.5 \end{array} $	$\begin{array}{ c c c }\hline 26.5 \\ 2.0 \\ \hline \end{array}$	$\begin{bmatrix} - \\ - \\ - \\ 0 \end{bmatrix}$		1:30 :54 — :27 :75 :90 :12 :88	$ \begin{array}{c c} 1.6 \\ - \\ 1.7 \\ 2.1 \\ 2.1 \\ 2.4 \end{array} $	$\begin{array}{c c} 4.5 \\ -1.4 \\ 3.1 \\ .3 \\ 1.3 \end{array}$	25·9 7·0 — 3·3 31·3 2·4 16·1	- - - - - 3:4		16 6 3 9 11 1 10
Total animal food	~==.01	44.4	72.7	17.2	928.7	4.76	-		86.0	3.4	28.3	58 29
Ccreals Sugars and starches Vegetables Fruits	95.50	$0 \begin{vmatrix} 0.2 \\ 1.8 \end{vmatrix}$	$\frac{1}{0}$	88.4		2·38 ·72 ·17 ·07	6.6	3 2		74·8 17·8 3·0 1·0		8 2
Total vegetable food	070.1	4 68.5	5 11.9	9 478.5	2353:3	3:34	60.4	60.7	14.0	96.6	_ <del> </del> -	41
Total food	. 1454.9	5 112.9	84.0	$\frac{-}{6}   \frac{-}{495.7}$	3282.0	8.10	100.0	0 100.0	100.0	100.0	100.0	100
Beverages, cond						.82	2 -	-	-	-	-	-

## No. LV.

		WRIG	нтэ.					Perce	NTAGES O	F TOTAL	Food.	
KIND OF FOOD		1	Nutrient	s.	Energy Value	Cost		1	Nutrients	3.	Energy	
MATERIAL.	Food Material in Grams.	Protein in Grams.	Fat in Grams.	Carbo- hydrates in Grams.	in Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	135:77 7:31 —	28·6 1·6	28·0 1·9	2·5 —		1·64 ·15 —	P. ct. 10.7 .6	P. ct. 28:0 1:6	P. ct. 48.2 3.3	P. ct. 0·6 —	P. ct.	P. ct. 33·1 3·0 —
Fish Eggs	75·06 —	12.5	0.2	_ _		·24 —	<b>5</b> ·9	12.2	0.3	_		4.8
Butter Cheese	15.21	$\frac{0.1}{8.0}$	$\frac{12.9}{-7.1}$	$ 12\cdot 1$		·26 — ·41	1.2	$\left \begin{array}{c}0.1\\-7.8\end{array}\right $	22·3 — 12·2	$-{2\cdot 9}$		5·2 - 8·3
Milk (skim)  Total animal	237.77	8.0		121			10 /					
food	471.12	50.8	50.1	14.6	734.1	2.70	37.1	49.7	86.3	3.5	27:3	54.4
Cereals Sugars and	494.71	48.7	7.8	279.5		1.50	38.9	47.7	13.4	66.3		30.3
starches Vegetables Fruits	106·08 200·31 —	$\begin{bmatrix} \frac{1}{2} \cdot 7 \\ - \end{bmatrix}$	$\frac{}{0.2}$	106·1 21·0 —		·57 ·19 —	8·3 15·7 —	$\frac{-}{2\cdot 6}$	$\frac{}{}$	$\begin{bmatrix} 25.2 \\ 5.0 \\ - \end{bmatrix}$		3·8 —
Total vegetable food	801.10	51.4	8.0	406.6	1952:0	2.26	62.9	50.3	13.7	96.5	72.7	45.6
Total food	1272.22	102.2	58.1	421.2	2686·1	4.96	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	13.02	_	_			•44		_	_			
				N	o. LV	T.						
Beef, veal, mutton, &c. Pork, lard, &c. Poultry	103·32 16·94	15·9 3·8 —	16·2 4·4 —	1·2 —		1·19 ·36	6·3 1·0	14·4 3·4	18·9 5·1 —	2		15·8 4·8
Fish Eggs Butter Cheesc	29·82 39·59 17·58	3·5 0·3 4·8	2·7 33·6 6·4	$\frac{-}{0.7}$		-50 -96 -36	1.8 2.4 1.1	3·2 ·3 4·4	$-3.1 \\ 39.1 \\ 7.45$			-6.7 $12.8$ $4.8$
Milk (sweet and skim) Black pudding	293·73 10·68	0·3 9·8	6·4 1·7	14·9 0·4		·65 ·09	17:8 ·6	8.9	7·45 2·0	3.0		8·6 1·2
Total animal food	511.66	38.4	71.4	17.2	892.0	4.11	31.0	34.9	83.1	3.4	27.0	54.7
Cercals Sugars and	646.78	62.6	14.0	340.2		2.29	39.3	56.7	16:3	67.9		30.2
starches Vegetables Fruits	98·76 390·43 —	0.6 8.7 —		88·6 54·8 —		·60 ·51	6·0 23·7 —	7·9 —	<sub>6</sub>	17·7 11·0		8·0 6·8
Total vegetable food	1135.97	71.9	14.5	483.6	2412.4	3.40	69.0	65.1	16.9	96.6	73.0	45.3
Total food	1647.63	110.3	85.9	500.8	3304.4	7:51	100.0	100.0	100.0	100.0	100.0	100.0
Beverages, condiments, &c	10.25			_		.37	-		_		_	-

## No. LVII.

		WEIGH	тв.					Peroent	rages of	TOTAL .	Foo <b>p.</b>	
Kind of Food	Food	N	utrients		Energy Value	Cost		N	itrients.		Energy	
Material.	Material in Grams.		Fat in Grams.	Carbo- hydrates in Grams.	Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
Beef, veal, mutton, &c. Pork, lard, &c. Black pudding Fish Eggs Butter Milk Buttermilk	124·44 27·47 3·63 70·94 4·80 17·73 5·01 154·47 90·86	24·2 5·7 0·1 10·9 0·5 0·1 1·3 5·0 2·7	24·6 8·6 0·5 0·7 0·4 15·0 1·8 6·1 0·4	$ \begin{array}{c c} 1.7 \\ \hline 0.1 \\ \hline 0.2 \\ 7.7 \\ 4.3 \end{array} $		1·51 ·44 ·04 ·40 ·07 ·44 ·10 ·40 ·15	P. ct. 7 · 8 1 · 7 · 2 4 · 4 · 3 1 · 2 · 3 9 · 6 5 · 7	P. ct. 21·4 5·0 ·1 9·6 ·4 ·1 1·2 4·4 2·4	P. et. 34·1 11·9 ·7 1·0 ·6 20·7 2·5 8·4 ·6	P. ct.  '4  1.7 1.0	P. et.	P. ct. 23.7 6.9 .6 6.3 1.1 6.9 1.6 6.3 2.4
Total animal food	499:35	50.5	58.1	14.0	804.8	3.55	31.2	44.6	80.5	3.1	27:1	55.8
Cereals Sugars and starches Vegetables Fruits	506·88 99·07 495·68	51:3	13.5	267·0 97·9 69·7		1.58 .55 .69	31·7 6·1 31·0 —	45·4 	18·7   - -8 -	59·5 21·8 15·6		24·8 8·6 10·8
Total vegetable food	1101.63	62.6	14.1	434.6	2169.6	2.82	68.8	55.4	19.5	96.9	72.9	44 · 9
Total food	1600.98	113.1	72.2	448.6	2974.4	6.37	100.0	100.0	100.0	100.0	100.0	100:0
Beverages, condiments, &c	11.63		_			•41	_	-	_	_	_	_
	<u>'</u>			N	o. LV	III.		,			1	1
Beef, veal, mutton, &c. Pork, lard, &c. Poultry Fish Eggs Butter Cheese	$ \begin{array}{c c} 49.79 \\ 64.45 \\ 29.94 \\ - 25.1.25 \end{array} $	$ \begin{array}{c c}  & 2.0 \\ \hline  & 6.2 \\  & 7.6 \\  & 0.3 \\ \hline  & - \end{array} $	0.5 5.9 25.4			1·82 ·24 ·36 1·32 ·91 —	$\begin{array}{c c}  & 3.6 \\  & 3.9 \\  & 1.8 \\  & - \end{array}$	$ \begin{array}{c cccc}  & 1.9 \\  \hline  & 5.8 \\  & 7.2 \\  & 3 \\  \hline  & - \end{array} $	25·5 3·9 — ·6 6·7 28·8 — 16·0			20·· 2·· 4·· 14· 10· - 10·
Milk  Total animal food	C11.0°		-	_		5.59	37.0	45.0	81.5	4.1	30.9	62
Cereals Sugars and starches Vegetables	468·48 . 135·79 436·0	$\begin{bmatrix} -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 $	$\begin{bmatrix} 15 \\ 0 \end{bmatrix}$	118·0 57·3		1.83 .85 .62	8.9	$\begin{bmatrix} 1 & 2 \\ 2 & 9 & 1 \end{bmatrix}$		27:3	2	9 6
Total vegetabl	0 1045.4		6 16.	3 414:9	2092.9	3.30	63.	0 55.0	18:5	95.9	_	37
Total food	. 1662.2	9 106.	4 88	1 432.8	3030.0	8.9	5 100.	0 100.0	100.0	100.0	100.0	100
Beverages, cond ments, &c.	i- 11·0	7 -			_	•4	5 -	-	_	-	-	

## No. LIX.

						_							
			WEI	GHTS.					Peroe	NTAGES (	OF TOTAL	Food.	
	Kind of Food	Food		Nutrien	ts.	Energy Value in	Cost	Food	]	Nutrient	s.	Energy	
		Material in Grams.	Protein in Grams	Grame		Calories.	Pence.	Food Ma- terial.	Protein.	Fat.	Carbo- hy- drates.	Value in Calories.	Cost.
	Beef, veal, mutton, &c. Pork, lard, &c. Poultry	139·96 23·56	24.4	20.0	1.8		1.67	P. ct. 13·8 2·3	P. ct. 28.8 5.4	P. ct. 22.9 9.4	P. et 9	P. ct.	P. ct. 22·4 6·6
	Fish Eggs Butter Cheese	63·38 94·80 36·87	10.5 11.2 0.3	0·1 8·8 31·3			·31 1·71 1·13	6·3 9·4 3·6	12·4 13·3 ·3	10·1 35·9			$ \begin{array}{ c c c } \hline 4.2 \\ 23.0 \\ 15.2 \\ \hline \end{array} $
1	Milk Black pudding	117·81 41·23	3.8	4·7 6·6	5.8		·31 ·45	11.6 4.1	4.5 1.5	5·4 7·6	2.9		4·2 6·0
	Total animal food	517.61	56.1	79.7	9:2	1008.9	6.07	51.1	66.2	91.4	4.6	51.0	81.6
	Cereals Sugars and	259.74	25.2	7.3	129.5		.99	25.7	29.8	8.4	64.7		13.3
7	starches Vegetables Truits	32·40 201·82 —	3.5	0.2	32·4 28·9 —		·18 ·20 —	3·2 20·0 —	<u>4</u> ·0		16·2 14·5		2·4 2·7 —
	Total vegetable food	493 96	28.7	7.5	190.8	969.7	1:37	48.9	33.8	8.6	95.4	49.0	18.4
	Total food	1011:57	84.8	87.2	200.0	1978.6	7.44		_				_
E	Beverages, condiments, &c	6:59		_		_	.29	- 1	-	-		_	_
					N	lo. LX	<b>.</b>		-			i	
P	Seef, veal, mutton, &c. ork, lard, &c.	81.0	15.0	16·1 —	_		1.33	4.9	13.8	14.9	_		16.1
F	oultry lish lggs	50.62	$\begin{bmatrix} \overline{4} \cdot 2 \\ - \end{bmatrix}$	0.1			31	3.1	$\frac{3.9}{}$	0.1	_		3.7
B	heese	70·87 5·06	0.7	60·2 1·8	$-\frac{1}{0\cdot 2}$		2.0	4.3	$\begin{bmatrix} \cdot 6 \\ 1 \cdot 3 \end{bmatrix}$	55.5			24.2
	Iilk	430:31	14.2	17.2	21.5		1.11	26.0	13.1	15.9	3.7		13.4
	Total animal food	637.86	35.5	95.4	21.7	1121.7	4.86	38.6	32.7	88.1	3.7	29.2	58.7
	ereals	691.13	69.7	12.7	398.7		2:38	41.8	64.4	11.7	68.2		28.8
	starches egetables ruits	141·75 182·25	3·1 —	$\begin{bmatrix} -0.2 \\ - \end{bmatrix}$	141·7 22·7 —		.78 .26 —	8.6	$\frac{1}{2\cdot 9}$	0.2	24·2 3·9 —		9.4
	Fotal vegetable food	1015-13	72.8	12.9	563·1	2727 · 2	3.42	61.4	67:3	11.9	96.3	70.8	41.3
	Total food	1652.99	108:3	108:3	584.8	3848.9	8.28				_		
В	everages, condiments, &c	10.1	-			_	·40	-					

#### APPENDIX IV.

## Physical Condition of Children.

		GIR	LS.	· · · · ·				Воз	rs.		
Number.	Age.	Height.	Weight.	Kilos.	Energy Value of Diet. Calories.	Number.	Age.	Height.	Weight.	Kilos.	Energy Value of Diet. Calories.
XIV., - XIV., - XXIV., XXIV., - XVII., - XXII., - IV., - II., - XXXII., L., - XXXII., LV., - XXIV., LV., - XXIV., LV., - XXIII., XVIII., LIV., -	12 11 10 10 9 8 7 6 6 6 6 6 6 6 5 5	3 312 	Lbs. 76 60 39 55 45½ 56 44 37½ 45 39 39 37 47 43 39 28 42 34 43 33	34·2 27·0 17·5 24·7 20·5 25·2 19·8 16·9 20·2 17·5 16·6 21·1 19·3 17·5 12·6 18·9 15·3 19·3 14·8	2690 2690 2412 3422 2690 2936 2931 2329 3882 4003 3822 3471 3215 3116 3882 2412 2686 2772 3248 3282	XXI., - II., - IV., - XIV., - X., - II., - XLI., - I.VIII., XIV., - XXX., - LIX., - LVII., - III., - III., - III., - XXXVI.,	5 5 5 5	$\begin{bmatrix} 3 & 1 \\ 2 & 6 \\ 3 & 4 \\ 3 & 0 \\ 3 & \frac{3^3}{4} \\ - \end{bmatrix}$	Lbs. 60 63 56 45 43 50 53 38 36 21 42 26 37 35 37 35	27·0 28·3 25·2 20·2 19·3 22·5 23·8 17·1 16·2 9·4 18·9 11·7 16·6 15·7	2329 4003 3882 2690 2435 4003 2723 3030 2690 3136 3341 1978 2974 4003 2891 4091

# GLASGOW STANDARD MEAN WEIGHTS (MACKENZIE).

(Quoted from Macgregor-Physique of Glasgow Children.)

A	Girls.	Boys.
Age.	Lbs.	Lbs.
56	37.8	38.6
	40.6	41.8
67	43.9	45.3
7—8		49:3
8—9	47.5	
910	51.9	53.6

## APPENDIX V.

## Diets of Rickety Families.

Group.	Number.	Protein Content in Grms.	Fat Content in Grms.	Calories.	Number of Rooms.	Number in House.
D B K E F G G D A B F C	II., IV., XVII., XVIII., XXIV., - XXXVI., - XXXXII., - XXXXIX., LVII., - LVIII., - LVIII., - LVIII., -	135.7 $138.2$ $115.0$ $103.0$ $107.2$ $90.9$ $64.0$ $112.0$ $108.5$ $99.8$ $111.2$ $110.3$ $113.1$ $106.4$	88·4 87·1 68·1 63·5 70·7 56·5 48·8 84·0 71·4 56·5 77·9 85·9 72·2 88·1	4003 3882 3305 2931 3248 2329 2412 3144 3136 2329 3422 3304 2974 3030	2 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7 12 12* 7 6 9 8 10 9† 10 8 8

<sup>\* 13</sup> people sleep in the house. † 6 of these are over 16 years of age.

#### APPENDIX VI.

Those marked "A." are from "American Food Materials," by Atwater and Bryant, Bulletin 28 (Revised Edition) U.S. Department of Agriculture, 1899.

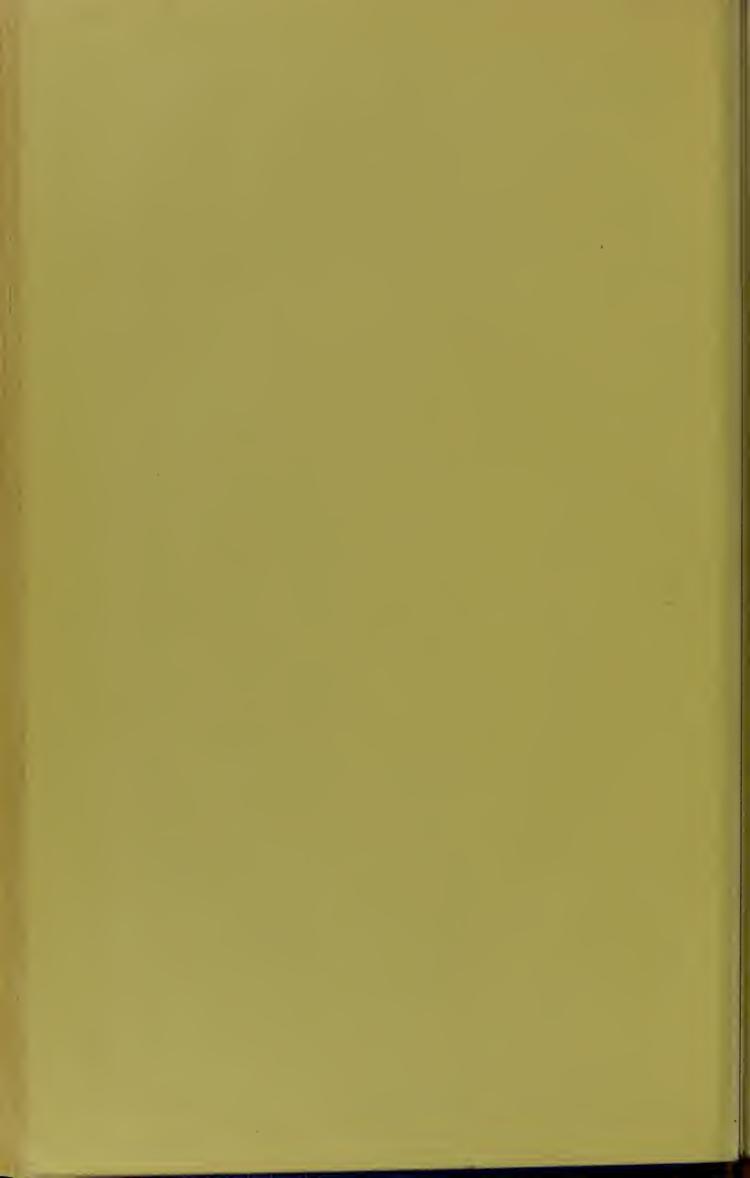
Those marked "E." are from analyses made in the College of Physicians' Laboratory, Edinburgh.

Those marked "G." are from analyses made in the Physiology Laboratory, Glasgow University.

A	Animal Foo	DD.		Vegetable Food.						
Kind of Food.	Source of Analysis.	Protein.	Fat.	Carbo- hydrates.	Kind of Food.	Source of Analysis.	Protein.	Fat.	Carbo- hydrates.	
Bccf (flank) Veal  Veal  Mutton (loin) Sheep's head Sheep's heart Liver  Corned beef Potted meat  Tongue  Mince  Sausages  Black pudding Dripping  Soup  Chicken  Rabbit  Ham  Pork chops  Salmi  Tripe  Eggs  Butter  Cheese (cheddar) Milk (sweet)  ,, (skim)  ,, (skim)  ,, (skim)  Haddock (fresh)  ,, (Findon) Herring (fresh)  ,, (salt)  ,, (kipper) Halibut  Sardines  Mackerel  Cod  Salt cod, ling Flounder Fish supper	A., p. 21 A., p. 31 A., p. 36 A., p. 37 A., p. 37 A., p. 37 A., p. 30 E. A., p. 29 G. G. G. G. G. E. E. A., p. 43 A., p. 53 A., p. 54 A., p. 55 A., p. 55 A., p. 55 A., p. 47 G. A., p. 47	$\begin{array}{c} 18.6 \\ 15.5 \\ 23.7 \\ 16.6 \\ 16.9 \\ 20.2 \\ 14.3 \\ 23.6 \\ 14.1 \\ 17.9 \\ 17.1 \\ 3.2 \\ \hline \\ \hline \\ 1.1 \\ 13.7 \\ 21.4 \\ 22.7 \\ 13.4 \\ 21.8 \\ 14.1 \\ 11.9 \\ 1.0 \\ 27.7 \\ 3.3 \\ 3.4 \\ 11.5 \\ 3.0 \\ 8.4 \\ 16.1 \\ 11.2 \\ 18.9 \\ 23.7 \\ 15.3 \\ 30.2 \\ 10.2 \\ 16.7 \\ 19.0 \\ 6.4 \\ 7.5 \\ \end{array}$	$\begin{array}{c} 19.9 \\ 7.9 \\ 7.9 \\ 18.5 \\ 0.2 \\ 12.6 \\ 3.1 \\ 23.8 \\ 27.7 \\ 6.7 \\ 31.1 \\ 23.4 \\ 16.2 \\ 97.7 \\ 0.1 \\ 12.3 \\ 9.7 \\ 26.2 \\ 24.2 \\ 36.2 \\ 3.1 \\ 9.3 \\ 85.0 \\ 36.8 \\ 4.0 \\ 0.3 \\ 0.4 \\ 0.5 \\ 0.4 \\ 3.9 \\ 14.6 \\ 3.4 \\ 4.4 \\ 18.6 \\ 4.2 \\ 0.3 \\ 0.4 \\ 0.5 \\ 0.6 \\ 9 \end{array}$		Bread Scone Flour Meal Barley Somolina Corn flour Rice Rolled oats Quaker oats Force Macaroni Potatoes Cabbage Carrots Turnips Onions Peas Haricot beans Lentils Lettuce Celery Beetroot Cucumber Rhubarb Sugar Jam Syrup Sugar Jam Syrup Sago Arrowroot Tapioca Oranges Tomatoes Apples Bananas Prunes Currants Raisins Oil Yeast	A., p. 61 A., p. 58 A., p. 56 A., p. 56 A., p. 56 A., p. 57 A., p. 54 G. A., p. 59 A., p. 68 A., p. 66 A., p. 66 A., p. 67 A., p. 67 A., p. 66 A., p. 67 A., p. 68 A., p. 65 A., p. 64 A., p. 64 A., p. 64 A., p. 65 A., p. 72 A., p. 69 A., p. 71 A., p. 73 A., p. 73 A., p. 73 A., p. 73	9·2 10·6 11·4 16·1 8·5 11·9 7·1 8·0 16·7 10·2 13·4 1·8 1·4 0·9 1·4 24·6 22·5 25·7 1·0 0·9 1·3 0·7 0·4 0·6 2·4 9·0 0·9 1·3 0·9 1·3 0·9 1·3 1·3 1·3 1·3 1·3 1·3 1·3 1·3	1·3 7·7 1·0 7·2 1·1 0·6 1·3 0·3 7·3 6·2 2·1 0·9 0·1 0·2 0·2 0·1 0·3 1·0 1·8 1·0 0·2 0·1 0·1 0·2 0·4 - 0·1 0·1 0·4 - 1·7 3·0 0·4 - 1·7 3·0 0·4	53·1 32·1 75·1 67·5 77·8 75·8 75·8 75·8 76·2 66·2 69·8 68·1 74·1 14·7 4·8 7·4 5·7 8·9 62·0 59·6 59·6 59·6 2·2 2·5 2·6 7·7 2·6 2·2 100·0 84·5 69·8 14·3 62·2 74·2 68·5 21·0	







(S) 7.C7

